Williamson, Carter[Williamson.Carter@epa.gov]; Stilman, Terry[Stilman.Terry@epa.gov]

From:

Berry, Chuck

Sent: Subject:

Tue 9/13/2016 3:22:49 PM Fw: Pelham Pipeline Spill

please review this. I don't want to sound whiney or uncooperative, but I really don't want to issue a 311. this RP is doing everything we ask them to.

Jim/Tony:

١y

Information Redacted pursuant to 5 U.S.C. Section 352 (a)(5), Exemption 5, Privileged Inter/Intra Agency Document

Specific Privilege: Deliberature Places

s.

Chuck Berry

On-Scene Coordinator

US Environmental Protection Agency

61 Forsyth Street, 11th Floor

Atlanta, GA 30303

404.562.8278 (Office)

404.859.0970 (Cell)

berry.chuck@epa.gov

Carallon Ballanes of - Specifical Ville

ad later in the

From: Truman, Bill

Sent: Tuesday, September 13, 2016 07:56

To: Englert, Brian; Berry, Chuck

Cc: Moore, Tony; Mann, Teresa; Joyner, William; Jack, Marie Jacq

Subject: Pelham Pipeline Spill

Brian and Chuck,

As you both are probably aware, this incident, along with several other Colonial spills will result in some level of OPA enforcement action, possibly a DOJ referral. As is your normal procedure, please make sure everything is well documented in photos and all issues included in the "20 Questions". Do you all anticipate issuing a 311 Order? I know you all don't need the bother, but as far as OPA enforcement, we just want to make sure we have the basic information while it is still fresh. The OPA contact for this case will be Bill Joyner.

Thanks for all your help.

Bill Truman, Chief

UST, PCB & OPA Enforcement & Compliance Section

61 Forsyth St.

Atlanta, GA 30303-8960

(404)562-9457

Fax: (404)562-8439

To: Cc:

Harper, Greg[Harper.Greg@epa.gov] Moore, Tony[moore.tony@epa.gov]

From:

Webster, James

Sent:

Tue 9/13/2016 3:01:04 PM

Subject: Re: ERNS REPORT FOR 0800 09/12/2016 TO 0800 09/13/2016

Please. Copy Michael Sams (USCG D8) on ERNS and sitreps involving the oil spill chuck is working. Reason being, GST is in D8

Sent from my iPhone

On Sep 13, 2016, at 8:53 AM, Harper, Greg < Harper. Greg@epa.gov > wrote:

ERNS REPORT FOR 0800 09/012/2016 TO 0800 09/13/2016

NRC 1158584, Pelham Pipeline Spill, Pelham, Shelby County, Alabama

Situation Reports (SITREPS) #1, #2 and #3 were previously delivered to the ERNS mailing list. SITREPS will continue to be delivered to the ERNS mailing list by 1800 EDT daily. See https://www.epaosc.org/pelhamgasolinespill for the current SITREPS and for additional information.

State Oil Haz Rad Other

AL	2	0	0	1	
FL	3	1	0	0	
GA	0	1	0	0	
KY	0	0	0	0	
MS	0	1	0	0	
NC	2	0	0	0	
SC	1	0	0	0	
TN	1	0	0	0	
Total	9	3	0	1	= 13

Response Personnel Status

Duty Officer:

OSC Greg

Harper

Berry

R1:

OSC Chuck Out

R2:

OSC Karen In

Buerki

Jackson, TN:

OSC Steve

Available

Louisville, KY: OSC Art

Spurlin

Smith

Mobile, AL:

OSC

Unavailable Leo Francendese

Unavailable

Raleigh, NC:

Tallahassee,

OSC Ken

Available

Rhame OSC Chris

Available

FL:

Russell

National Response Center: 1-800-424-8802 Phone Duty E-Mail: R4DUTYOSC@EPA.GOV

Phone Duty MOBILE #: 404-242-3393

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Thur 9/15/2016 12:45:21 AM

Subject: Fwd: SITREP #5 - Pelham Pipeline Spill Pelham Pipeline Spill SITREP 5 09142016.docx ATT00001.htm

;;

Sent from my iPhone

Begin forwarded message:

From: "Harper, Greg" < Harper. Greg@epa.gov> Date: September 14, 2016 at 8:25:09 PM EDT To: "Moore, Tony" < moore.tony@epa.gov>

Cc: "Berry, Chuck" < Berry.Chuck@epa.gov >, "Tripp, Christopher"

< tripp.christopher@epa.gov>

Subject: SITREP #5 - Pelham Pipeline Spill

Tony,

Please find the attached SITREP #5 from the Pelham Pipeline Spill.

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Thur 9/15/2016 1:02:30 AM Sent:

Subject: Re: SITREP #5 - Pelham Pipeline Spill

Sent from my iPhone

On Sep 14, 2016, at 8:51 PM, Harper, Greg < Harper. Greg@epa.gov > wrote:

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #5

1800 CDT, September 14, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by the property owner, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has been updated to 235,000 gallons - See "Current Operations" for more

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Threatened and endangered (T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Garrard and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center (JIC).

OSC Garrard was mobilized to the site to overlap with OSC Williamson today, he will assume responsibilities for Operations. OSC Tripp mobilized to the site to serve as the EPA Situation Unit Leader. OSC Williamson demobilized during this operational period.

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

Both stopples are in place. Colonial is actively vacuuming out product and pressuring the line with nitrogen to increase recovery. The pressurization of the line increases the rate of discharge at the break. LEL levels at the break are too high to recover product before it discharges to the stream and then into the pond.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remains on site providing air monitoring services. They continue monitoring with the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excess benzene and LEL remains. Today's highest VOC level peaked at 989 parts per million (ppm). The highest benzene level recorded was 17.5 ppm. LEL levels were reported to be in the 41% range.

Colonial has managed to remove approximately 178,217 gallons of liquid from Pond 2. Of that volume, 48,125 gallons of fuel has been recovered and 130,092 gallons of mixed oil/water remain.

Colonial has performed a mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 144,035 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the

pond outfall. Colonial continues to monitor the Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. No adverse weather impacts are expected from the tropical system off the coast of Georgia.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard and two GST members continue to provide oversight of site safety and monitor the operation's progress. Two GST members continue to observe night operations.

James Pickney, Region 4 Office of External Affairs, arrived at Incident Command Center and integrated into JIC. The JIC set up two interviews for the media with all members of UC, including OSC Berry. The Birmingham, AL news outlets in attendance were WBRC and AL.com. Additionally, Colonial visited 15 homes nearest to the spill site, they were able to discuss the situation with nine households as well as hand out fact sheets.

The fire chief deemed the transfer of product from the pipeline to frac tanks was too high of a risk, therefore operations have changed to direct tanker to tanker trucks transfers. Scrubbers were used on the vacuum trucks while product was pumped from the pipeline to the transport tanker trucks to reduce the gasoline vapors. The tanker trucks are making a round trip to Colonial's Pelham Junction facility to off-loading.

OSC Garrard called the Federal Aviation Administration to request an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

today's UC meeting, Colonial contractor began collecting water sampling on Saturday when the sample results were presented during the UC briefing. 9 sampling locations have been established, two water sample collected from Pond 3 had benzene detected at 90 mg/L and 98 mg/L the other 7 were below detection limits.

PLANNED RESPONSE ACTIVITIES

Due to the ongoing response efforts and unknown timelines, the EPA OSC will make a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

During today's UC meeting, the UC learned that Colonial contractors had begun collecting water sampling on Saturday. Thus was only due to the presentation of sampling results were presented during the UC briefing. EPA OSC has requested two START contractors and an Environmental Unit Leader to monitor Colonial Pipeline's sampling efforts.

- ∀ Continue to participate in UC
- ∀ Monitor removal activities
- ∀ Monitor safety air monitoring
- ∀ Participate in the Joint Information Center
- ∀ Prepare for and coordinate a transition to a removal phase

∀ Preform water sampling

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Thur 9/15/2016 1:10:45 PM

Subject: Re: SITREP #5 - Pelham Pipeline Spill

,,,,,,,,,,, Yes

Sent from my iPhone

On Sep 15, 2016, at 9:06 AM, Harper, Greg < Harper. Greg@epa.gov > wrote:

Tony,

Do we want to include DHS on daily ERNS? I am now including Mr. Williams on the Pelham SITREPs. But if there was another large spill we would not know to include him.

Thank you,

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response Removal and Preparedness Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Weeks, Victor

Sent: Thursday, September 15, 2016 8:59 AM To: Harper, Greg < Harper Greg@epa.gov> Subject: FW: SITREP #5 - Pelham Pipeline Spill

Greg:

Do you know if we can add DHS employees to the ERNS distribution list?

Victor L. Weeks

U.S. EPA Region 4

Air, Pesticides & Toxics Management Division

Chemical Emergency Preparedness & Prevention Coordinator

Atlanta Federal Center

61 Forsyth ST

Atlanta, Georgia 30024

Direct: 404-562-9189

Cell: 770-363-7715

FAX: 404-562-9163

From: Williams, James [mailto:James.Williams@HQ.DHS.GOV]

Sent: Thursday, September 15, 2016 8:47 AM To: Weeks, Victor < weeks.victor@epa.gov >

Cc: Deas, William < william.deas@HQ.DHS.GOV >; Albini, David

<David Albini@HQ.DHS.GOV>; Whittington, Angela

< Angela. Whittington@HQ.DHS.GOV >; Gibbs, Kelly < Kelly.Gibbs@HQ.DHS.GOV >

Subject: RE: SITREP #5 - Pelham Pipeline Spill

Victor,

Would it be possible for us to get on the distro of the region 4 SITREPS for events such as these?

Jim

James E. Williams

Supervisory Chemical Security Inspector

Department of Homeland Security

Office of Infrastructure Protection

Infrastructure Security Compliance Division

Field Operations Branch

Cosby, TN

Mobile 202.604.8712

CFATS Help Desk: 1-866-323-2957

Questions Regarding: CSAT@DHS.GOV

WWW.DHS.GOV/CHEMICALSECURITY

Tip Line: 877-FYI 4 DHS (877 394-4347)

November is Critical Infrastructure Security and Resilience Month

For more information about critical infrastructure, visit http://www.dhs.gov/critical-infrastructure

"With honor and integrity, we will safeguard the American people, our homeland, and our values"

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From: Weeks, Victor [mailto:weeks.victor@epa.gov] Sent: Thursday, September 15, 2016 8:28 AM

To: Garrard, Jordan Cc: Williams, James

Subject: FW: SITREP #5 - Pelham Pipeline Spill

Jordan:

James Williams with DHS was wondering if Colonial Pipeline has projected a date for when the pipeline will be returned to service?

Also, has Colonial Pipeline quantified any regional gasoline supply issues associated with this transmission pipeline incident?

Victor L. Weeks

U.S. EPA Region 4

Air, Pesticides & Toxics Management Division

Chemical Emergency Preparedness & Prevention Coordinator

Atlanta Federal Center

61 Forsyth ST

Atlanta, Georgia 30024

Direct: 404-562-9189

Cell: 770-363-7715

FAX: 404-562-9163

From: Harper, Greg

Sent: Wednesday, September 14, 2016 8:51 PM Cc: Harper, Greg < Harper.Greg@epa.gov > Subject: SITREP #5 - Pelham Pipeline Spill

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #5

1800 CDT, September 14, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by the property owner, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has been updated to 235,000 gallons – See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Threatened and endangered (T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill,

although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Garrard and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center (JIC).

OSC Garrard was mobilized to the site to overlap with OSC Williamson today, he will assume responsibilities for Operations. OSC Tripp mobilized to the site to serve as the EPA Situation Unit Leader. OSC Williamson demobilized during this operational period.

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

Both stopples are in place. Colonial is actively vacuuming out product and pressuring the line with nitrogen to increase recovery. The pressurization of the line increase the rate of discharge at the break. LEL levels at the break are too high to recover product at the break before it discharges to the stream and then into the pond.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remains on site providing air monitoring services. They continue monitoring the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excess benzene and LEL readings. Today's highest VOC level peaked at 989 parts per million (ppm). The highest benzene level recorded was 17.5 ppm. LEL levels were reported to be in the 41% range.

Colonial has managed to remove approximately 178,217 gallons of liquid from Pond 2. Of that volume 48,125 gallons of fuel has been recovered and 130,092 gallons of mixed oil/water remain.

Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 144,035 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the

pond outfall. Colonial continues to monitor the Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. No adverse weather impacts are expected from the tropical system off the coast of Georgia.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

James Pickney arrived at Incident Command Center and integrated into JIC. The JIC set up two interviews with all members of UC, including OSC Berry. The Birmingham, AL news outlets were WBRC and AL.com. Additionally, Colonial visited 15 homes nearest to the spill site, they were able to discuss the situation with 9 households as well as handout fact sheets.

The fire chief deemed the transfer of product from the pipeline to frac tanks was to high risk, therefore operations changed to direct tanker to tanker trucks. Scrubbers were used on the vacuum trucks while the vacuum trucks pumped product from the pipeline to the transport tanker trucks to reduce the gasoline vapors. The tanker trucks are making a round trip to Colonial's Pelham Junction facility to off-load.

OSC Garrard called the Federal Aviation Administration to request an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

UC learned during today's UC meeting, Colonial contractor began collecting water sampling on Saturday when the sample results were presented during the UC briefing. 9 sampling locations have been established, two water sample collected from Pond 3 had benzene detected at 90 mg/L and 98 mg/L the other 7 were below detection limits.

PLANNED RESPONSE ACTIVITIES

Due to the ongoing response efforts and unknown timelines, the EPA OSC will make a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

Because UC learned during today's UC meeting, Colonial contractor began collecting water sampling on Saturday when the sample results were presented during the UC briefing. EPA OSC has requested two START contractors and an Environmental Unit Leader to monitor Colonial Pipeline's sampling efforts.

- ∀ Continue to participate in UC
- ∀ Monitor removal activities
- ∀ Monitor safety air monitoring
- ∀ Participate in the Joint Information Center
- ∀ Prepare for and coordinate a transition to a removal phase
- ∀ Preform water sampling

From: Moore, Tony

Sent: Fri 9/16/2016 12:26:41 AM

Subject: Fwd: SITREP #6

,,,,

Sent from my iPhone

Begin forwarded message:

From: "Harper, Greg" < Harper. Greg@epa.gov > Date: September 15, 2016 at 8:22:29 PM EDT To: "Moore, Tony" < moore.tony@epa.gov >

Subject: SITREP #6



NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #6

1800 CDT, September 15, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by a state mining inspector, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has since been updated in NRC Reports to 252,000 gallons – See "Current Operations" for more information).

m]

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) and EPA have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of explosive vapors and volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Consult with the Department of Interior and the State of Alabama identified threatened and endangered (T&E) species in the area of the spill. However, no T&E species have been reported impacted from the spill, although several common species have been impacted.

The appropriate members were engaged during the initial response notification process. The following members were part of the initial notification: ADEM; Department of the Interior (DOI); and United States Environmental Protection Agency (USEPA). A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Garrard, OSC Tripp and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. OSC Stilman has been deployed to assist with Incident Command. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

Both stopples are in place. Colonial has ceased recovering product from the line as the nitrogen displacement has reached its maximum efficacy. Colonial has developed a displacement plan to use water to displace the remained of the fuel. Activities for this operations are estimated to be ready Saturday. Fuel continues to leak from the break, but at a much reduced rate.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remains on site providing air monitoring services. CTEH continues monitoring the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excess benzene and LEL readings. Today's VOC exceedance levels range from 30 - 2,699 parts per million (ppm). The exceedances from benzene range 0.6 - 18 ppm. LEL exceedance levels range from 10% - 196%.

Colonial has managed to remove approximately 233,614 gallons of liquid from Pond 2. Of that volume 58,461 gallons of fuel has been recovered and 175,531 gallons of mixed oil/water remain in frac tanks.

Colonial has performed an initial mass balance calculation and determined an estimated volume of 252,000 gallons of fuel was discharged. They are estimating 180,634 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the pond outfall. Colonial continues to monitor Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. OSC Garrard, OPS, was on site in the morning exploring areas along Peel Creek with GST and Colonial personnel for potential placement of an additional underflow dam. Additional locations were identified, and Colonial has agreed to reserve the material to construct these. Additionally Colonial has estimated a 10-hour construction time for this final structure. To facilitate access, Colonial is building an access road along the entire length of Peel Creek.

No adverse weather impacts are expected from the tropical system off the coast of Georgia.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

James Pickney remains integrated with the JIC. One CIC is mobilizing to the site tomorrow. OSC Berry provided one telephone interview to the local NBC affiliate this afternoon.

The fire chief deemed the transfer of product from the pipeline to frac tanks was too high-risk, therefore operations changed to direct tanker to tanker trucks. Scrubbers were used on the vacuum trucks while the vacuum trucks pumped product from the pipeline to the transport tanker trucks to reduce the gasoline vapors. The tanker trucks are making a round

trip to Colonial's Pelham Junction facility to off-load.

The Federal Aviation Administration continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

OSC Tripp was on-site performing an observation of all operation areas with GST most of the day.

The county sheriff's office was patrolling the site air space by helicopter to enforce the air restriction put in place by the FAA. During the night there was a drone being flown over the site by an unknown drone operator.

Two START members arrived on-scene to assist with surface water and sediment sampling operations. OSC Stilman mobilized in this morning as the Deputy IC for EPA and provided comments to the Surface water and sediment sampling plan. An additional START member is mobilizing in tonight to provide ICS support.

Work-site operations were ceased overnight due to increased VOCs, LEL, and benzene levels from 0230-0500. A temporary site-wide evacuation was ordered at 0300 due to elevated levels at the main staging area. Operations at the Stopples and the pond did not commence until 0830. Vapor scrubber units were switched out for a liquid vapor scrubber unit. Due to high LEL the Unified Command has developed a Vapor Suppression Plan and a Site Evacuation Plan. Vapor suppression foam, F-500, will be used to allow for the soil excavation around the pipeline to continue.

Recovery operations are occurring at two points 2a and 2b. Vacuum trucks from 2b are transferring recovered product to 4 frac tanks at staging 2b. There are 2 frac tanks at staging 2a where they are recovering product from recovery point 2a.

There are currently 14 frac tanks at the main staging area. Visual observations indicate gasoline thickness on pond 2 to be 1-1.5 inches at recovery point 2b, less than 0.10 inch at recovery point 2a.

Colonial is implementing a backup plan for restoration of service by constructing a bypass around the leak. The use of this will be determined by the difficulties found during the success and timing of the water displacement plan and excavation of the break. Colonial has given a tentative restoration time of late next week.

PLANNED RESPONSE ACTIVITIES

Due to the ongoing response efforts and unknown timelines, the EPA OSC made a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

The EPA OSC has requested an additional START contractors to assist with Incident Command Post Operations. START and OSC Stilman will continue to monitor Colonial

Pipeline's sampling and monitoring efforts.

∀ Continue to participate in UC

∀ Monitor removal activities

∀ Monitor safety air monitoring

∀ Participate in the Joint Information Center

∀ Prepare for and coordinate a transition to a removal phase

∀ Preform water sampling

 \forall Finalize Surface Water and Sediment Sampling Plan

∀ Finalize Vapor Suppression Plan

∀ Finalize Site Evacuation Plan

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Fri 9/16/2016 12:39:41 AM

Subject: Re: SITREP #6

Good to go

Sent from my iPhone

On Sep 15, 2016, at 8:22 PM, Harper, Greg < Harper. Greg@epa.gov > wrote:

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #6

1800 CDT, September 15, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by a state mining inspector, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has since been updated in NRC Reports to 252,000 gallons - See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) and EPA have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of explosive vapors and volatile organic compounds (VOC) emitted for the large areas of

pooled gasoline.

Consult with the Department of Interior and the State of Alabama identified threatened and endangered (T&E) species in the area of the spill. However, no T&E species have been reported impacted from the spill, although several common species have been impacted.

The appropriate members were engaged during the initial response notification process. The following members were part of the initial notification: ADEM; Department of the Interior (DOI); and United States Environmental Protection Agency (USEPA). A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Garrard, OSC Tripp and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. OSC Stilman has been deployed to assist with Incident Command. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

Both stopples are in place. Colonial has ceased recovering product from the line as the nitrogen displacement has reached its maximum efficacy. Colonial has developed a displacement plan to use water to displace the remainder of the fuel. Activities for this operations are estimated to be ready by Saturday. Fuel continues to leak from the break, but at a much reduced rate.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remain on site providing air monitoring services. CTEH continues monitoring the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excessive benzene and LEL readings. Today's VOC exceedance levels range from 30 - 2,699 parts per million (ppm). The exceedances from benzene range 0.6 - 18 ppm. LEL exceedance levels range from 10% - 196%.

Colonial has managed to remove approximately 233,614 gallons of liquid from Pond 2. Of that volume 58,461 gallons of fuel has been recovered and 175,531 gallons of mixed oil/water remain in frac tanks.

Colonial performed an initial mass balance calculation and determined an estimated volume of 252,000 gallons of fuel was discharged. They are estimating 180,634 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the pond outfall. Colonial continues to monitor Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. OSC Garrard, OPS, was on site in the morning exploring areas along Peel Creek with GST and Colonial personnel for potential placement of an additional underflow dam. Additional locations were identified, and Colonial has agreed to reserve material to construct these features. Additionally, Colonial has estimated a 10-hour construction time for this final structure. To facilitate access, Colonial is building an access road along the entire length of Peel Creek.

No adverse weather impacts are expected for the next operational period.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

James Pickney remains integrated with the JIC. One CIC is mobilizing to the site tomorrow. OSC Berry provided one telephone interview to the local NBC affiliate this afternoon.

The fire chief deemed the transfer of product from the pipeline to frac tanks was too high-risk, therefore operations were changed to direct tanker transfer. Scrubbers were used on the vacuum trucks while the vacuum trucks pumped product from the pipeline to the transport tanker trucks to reduce the gasoline vapors. The tanker trucks are making a round trip to Colonial's Pelham Junction facility to off-load.

The Federal Aviation Administration continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

OSC Tripp was on-site performing an observation of all operation areas with GST most of the day. The county sheriff's office was patrolling the site air space by helicopter to enforce the air restriction put in place by the FAA. During the night there was a drone being flown over the site by an unknown operator.

Two START members arrived on-scene to assist with surface water and sediment sampling operations. OSC Stilman mobilized in this morning as the Deputy IC for EPA and provided comments to the Surface water and sediment sampling plan. An additional START member is mobilizing in tonight to provide ICS support.

Work-site operations were ceased overnight due to increased VOCs, LEL, and benzene levels from 0230-0500. A temporary site-wide evacuation was ordered at 0300 due to elevated levels at the main staging area. Operations at the Stopples and the pond did not commence until 0830. Vapor scrubber units were switched out for a liquid vapor scrubber unit. Due to high LEL, the Unified Command has developed a Vapor Suppression Plan and a Site Evacuation Plan. Vapor suppression foam, F-500, will be used to allow for the soil excavation around the pipeline to continue.

Recovery operations are occurring at two points 2a and 2b. Vacuum trucks from 2b are transferring recovered product to 4 frac tanks at staging 2b. There are 2 frac tanks at staging 2a where they are recovering product from recovery point 2a.

There are currently 14 frac tanks at the main staging area. Visual observations indicate gasoline thickness on pond 2 to be 1-1.5 inches at recovery point 2b, less than 0.10 inch at recovery point 2a.

Colonial is implementing a backup plan for restoration of service by constructing a bypass around the leak. The use of this will be determined by the difficulties found during the success and timing of the water displacement plan and excavation of the break. Colonial has given a tentative restoration time of late next week.

PLANNED RESPONSE ACTIVITIES

Due to the ongoing response efforts and unknown timelines, the EPA OSC made a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

The EPA OSC has requested an additional START contractors to assist with Incident Command Post Operations. START and OSC Stilman will continue to monitor Colonial Pipeline's sampling and monitoring efforts.

- ∀ Continue to participate in UC
- ∀ Monitor removal activities
- ∀ Monitor safety air monitoring
- ∀ Participate in the Joint Information Center
- ∀ Prepare for and coordinate a transition to a removal phase
- ∀ Preform water sampling
- ∀ Finalize Surface Water and Sediment Sampling Plan

 \forall Finalize Vapor Suppression Plan

∀ Finalize Site Evacuation Plan

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

Hill, Franklin[Hill.Franklin@epa.gov]

Cc:

Webster, James [Webster.James@epa.gov]

From:

Moore, Tony

Sent:

Fri 9/16/2016 12:51:33 AM

Subject:

Re: EOC Spot Report: Region 4, Colonial Pipeline Spill, Pelham, AL (NRC # 1158584) -

Update #5

This is my first hearing of a TN waiver

Sent from my iPhone

On Sep 15, 2016, at 8:49 PM, Hill, Franklin < Hill.Franklin@epa.gov > wrote:

Sent from my iPhone

Begin forwarded message:

From: "Meiburg, Stan" < Meiburg.Stan@epa.gov > Date: September 15, 2016 at 6:46:22 PM EDT

To: "Heard, Anne" < Heard.Anne@epa.gov >, "Lapierre, Kenneth"

< Lapierre Kenneth@epa.gov >, "Hill, Franklin" < Hill. Franklin@epa.gov >, "Kemker,

Carol" < Kemker.Carol@epa.gov >, "Wilkes, Mary" < Wilkes.Mary@epa.gov >

Subject: Fwd: EOC Spot Report: Region 4, Colonial Pipeline Spill, Pelham, AL

(NRC # 1158584) - Update #5

Note: this SITREP did not include, but should have, the associated request by TN for an RVP waiver.

Stan

Sent from my iPhone

Begin forwarded message:

From: "Eoc, Epahq" < Eoc. Epahq@epa.gov > Date: September 15, 2016 at 11:59:56 AM CDT

To: "Eoc, Epahq" < Eoc. Epahq@epa.gov >

Subject: EOC Spot Report: Region 4, Colonial Pipeline Spill, Pelham, AL

(NRC # 1158584) - Update #5

This report is being sent as a bcc to prevent accidental Reply to All messages.

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EOC Spot Report: Region 4, Colonial Pipeline Spill into Pond Near Peel Creek, Pelham, AL (NRC # 1158584) — Update #5

US Environmental Protection Agency

Report as of 1300 ET on 09/15/2016

Overview: On September 9th at 1449 ET, Colonial Pipeline reported to the National Response Center that there was a gasoline spill from a 36" subsurface transmission line. Gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek, a tributary of the Cahaba River. An estimated 6,000 barrels of gasoline (253,000 gallons) have been discharged as a result of the leak. The spill location is in a remote location so no evacuations are necessary. The nearest residential neighborhood is located two miles away.

Colonial Pipeline crews continue to prepare the affected pipeline segment for excavation and repair while cleaning up the spill. Colonial Pipeline continues to collaborate with local, state and federal agencies, including the Environmental Protection Agency, Shelby County Emergency Management Agency, Helena Fire Department, Pelham Fire Department, and others in connection with the response. As a precautionary measure, airspace above the release location has been restricted to further protect responders, personnel and the public. According to the FAA, the restriction will remain in effect until 9/18/16.

Colonial has removed approximately 178,217 gallons of liquid from Pond 2. Of that volume, 48,125 gallons of oil have been separated and 130,092 gallons of mixed oil/water remain. Colonial established a pumping area on the north end of the pond where vapor levels were lower. Vacuum trucks continue to pump from this location. Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 144,035 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The high level of explosive vapors is the greatest limiting factor to recovery operations. Colonial contractor CTEH is on site providing air monitoring services. All personnel entering the hot zone are required to have flame resistant clothing and an air monitoring escort. Action levels for benzene, VOCs and explosive vapors have been established.

The diversions designed for Pond 3 are in place, which include a substantial underflow dam at the pond's outfall. No oil sheening is visible along the shoreline at Pond 3. Colonial continues to monitor the pond and will notify Unified Command if any petroleum is observed.

State, Local and other Federal Agency Actions: The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. The Shelby County Emergency Management Association (EMA) responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State- and County-level agencies. An Incident Command post was established in Hoover, Alabama. United States Coast Guard (USCG) Gulf Strike Team (GST) members have been assisting with health and safety oversight and response operations.

EPA Actions: Four EPA Region 4 personnel and 4 USCG Strike Team Members are currently deployed to assist with the response and are integrated into Unified Command. EPA and USCG GST members are incorporated into air monitoring efforts. A Community Involvement Coordinator (CIC) is assisting at the Joint Information Center (JIC). The JIC set up two interviews with all members of UC. The Birmingham, AL news outlets were WBRC and AL.com. At this time, a Regional Response Team 4 (RRT4) activation is not planned. A Natural Resources Trustee consultation was held with a Region 4 Department of Interior representative. Threatened and endangered species in the area of the spill have been identified but are not impacted. Due to the ongoing response efforts, the EPA OSC will make a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

Media Interest: Low (local)

http://www.al.com/news/index.ssf/2016/09/pipeline_leak_spilled_an_estim.html

The HQ EOC will continue to monitor and provide updates as needed.

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Eugene Lee, Senior Watch Officer

U.S. Environmental Protection Agency

Headquarters Emergency Operations Center

1200 Pennsylvania Ave

Washington, DC 20004

202-564-3850

mailto:eoc.epahq@epa.gov

Hill, Franklin[Hill.Franklin@epa.gov]

From:

Moore, Tony

Sent:

Fri 9/16/2016 12:58:24 AM

Subject: Re: EOC Spot Report: Region 4, Colonial Pipeline Spill, Pelham, AL (NRC # 1158584) -

······· Will do

Sent from my iPhone

On Sep 15, 2016, at 8:57 PM, Hill, Franklin < Hill. Franklin@epa.gov > wrote:

Coordinate with APTMD

Sent from my iPhone

On Sep 15, 2016, at 8:51 PM, Moore, Tony < moore.tony@epa.gov > wrote:

This is my first hearing of a TN waiver

Sent from my iPhone

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Sent from my iPhone

Begin forwarded message:

From: "Meiburg, Stan" < Meiburg.Stan@epa.gov> Date: September 15, 2016 at 6:46:22 PM EDT

To: "Heard, Anne" < Heard. Anne@epa.gov >, "Lapierre, Kenneth"

< Lapierre Kenneth@epa.gov >, "Hill, Franklin" < Hill.Franklin@epa.gov >,

"Kemker, Carol" < Kemker.Carol@epa.gov >, "Wilkes, Mary"

< Wilkes. Mary@epa.gov>

Subject: Fwd: EOC Spot Report: Region 4, Colonial Pipeline Spill,

Pelham, AL (NRC # 1158584) - Update #5

Note: this SITREP did not include, but should have, the associated request by TN for an RVP waiver.

Stan

Sent from my iPhone

Begin forwarded message:

From: "Eoc, Epahq" < Eoc. Epahq@epa.gov > Date: September 15, 2016 at 11:59:56 AM CDT

To: "Eoc, Epahq" < Eoc. Epahq@epa.gov >

Subject: EOC Spot Report: Region 4, Colonial Pipeline Spill,

Pelham, AL (NRC # 1158584) - Update #5

This report is being sent as a bcc to prevent accidental Reply to All messages.

UNCLASSIFIED//FOR OFFICIAL USE ONLY

EOC Spot Report: Region 4, Colonial Pipeline Spill into Pond Near Peel Creek, Pelham, AL (NRC # 1158584) – Update #5

US Environmental Protection Agency

Report as of 1300 ET on 09/15/2016

Overview: On September 9th at 1449 ET, Colonial Pipeline reported to the National Response Center that there was a gasoline spill from a 36" subsurface transmission line. Gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek, a tributary of the Cahaba River. An estimated 6,000 barrels of gasoline (253,000 gallons) have been discharged as a result of the leak. The spill location is in a remote location so no evacuations are necessary. The nearest residential neighborhood is located two miles away.

Colonial Pipeline crews continue to prepare the affected pipeline segment for excavation and repair while cleaning up the spill. Colonial Pipeline continues to collaborate with local, state and federal agencies, including the Environmental Protection Agency, Shelby County Emergency Management Agency, Helena Fire Department, Pelham Fire Department, and others in connection with the response. As a precautionary measure, airspace above the release location has been restricted to further protect responders, personnel and the public.

According to the FAA, the restriction will remain in effect until 9/18/16.

Colonial has removed approximately 178,217 gallons of liquid from Pond 2. Of that volume, 48,125 gallons of oil have been separated and 130,092 gallons of mixed oil/water remain. Colonial established a pumping area on the north end of the pond where vapor levels were lower. Vacuum trucks continue to pump from this location. Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 144,035 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The high level of explosive vapors is the greatest limiting factor to recovery operations. Colonial contractor CTEH is on site providing air monitoring services. All personnel entering the hot zone are required to have flame resistant clothing and an air monitoring escort. Action levels for benzene, VOCs and explosive vapors have been established.

The diversions designed for Pond 3 are in place, which include a substantial underflow dam at the pond's outfall. No oil sheening is visible along the shoreline at Pond 3. Colonial continues to monitor the pond and will notify Unified Command if any petroleum is observed.

State, Local and other Federal Agency Actions: The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. The Shelby County Emergency Management Association (EMA) responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State- and County-level agencies. An Incident Command post was established in Hoover, Alabama. United States Coast Guard (USCG) Gulf Strike Team (GST) members have been assisting with health and safety oversight and response operations.

EPA Actions: Four EPA Region 4 personnel and 4 USCG Strike Team Members are currently deployed to assist with the response and are integrated into Unified Command. EPA and USCG GST members are incorporated into air monitoring efforts. A Community Involvement Coordinator (CIC) is assisting at the Joint Information Center (JIC). The JIC set up two interviews with all members of UC. The Birmingham, AL news outlets were WBRC and <u>AL.com</u>. At this time, a Regional Response Team 4 (RRT4) activation is not planned. A Natural

Resources Trustee consultation was held with a Region 4 Department of Interior representative. Threatened and endangered species in the area of the spill have been identified but are not impacted. Due to the ongoing response efforts, the EPA OSC will make a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

Media Interest: Low (local)

http://www.al.com/news/index.ssf/2016/09/pipeline leak spilled an estim.html

The HQ EOC will continue to monitor and provide updates as needed.

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Eugene Lee, Senior Watch Officer

U.S. Environmental Protection Agency

Headquarters Emergency Operations Center

1200 Pennsylvania Ave

Washington, DC 20004

202-564-3850

mailto:eoc.epahq@epa.gov

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Fri 9/16/2016 11:29:30 PM

Subject: Re: SITREP #7

Minor corrections made, good to go

Sent from my iPhone

On Sep 16, 2016, at 7:04 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Tony,

I have not read this yet, I have a spill notification I have to work. If you will read and edit I will send it out to everyone.

Thank you, Greg

Sent from my iPhone

Begin forwarded message:

From: "Eichinger, Kevin" < Eichinger. Kevin@epa.gov>

Date: September 16, 2016 at 6:48:23 PM EDT To: "Harper, Greg" < Harper.Greg@epa.gov>

Subject: SITREP #7

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to CPC was made by a state mining inspector, however no volume estimate was provided at the time. CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons - 336,000 gallons).

The local fire department responded and established a secured zone around the spill site. Local responders detected hazardous conditions due to potentially explosive vapor concentration around the spill location. Shelby County Emergency Management

responded and confirmed that no public or private drinking water sources are currently threatened by the spill.

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

CPC confirmed that the impacted transmission line is shut down. Environmental contractors for CPC are on site to conduct air monitoring and remediation activities. Delays to remediate the spill routinely occur due to elevated concentrations of volatile organic compounds (VOC), specifically benzene, and explosive vapors exceeding the lower explosive limit (LEL).

EPA consulted with the Department of Interior (DOI) and the State of Alabama to identify threatened and endangered (T&E) species in the area of the spill. To EPA's knowledge, no impacts to T&E species have been reported at this time; however, field crews have noted minimal impacts to wildlife in the spill area.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, CPC, ADEM, and Shelby County. OSC Berry will demobilize on September 17, 2016. OSC Kevin Eichinger will assume EPA's position in Unified Command. OSC Garrard, OSC Tripp and four US Coast Guard Gulf Strike Team members remain deployed to assist with field observations. OSC Stilman remains deployed to assist in the Environmental Unit. Kerisa Coleman, a Region 4 public affairs specialist, arrived September 16, 2016 to assist in the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 6

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

A 6-inch pipe was observed discharging water from Pond 3; however flow was

restricted and likely due to a blockage. CPC has installed a plug in the pipe to reduce the potential of petroleum impacted water being released.

The elevated benzene and LEL continue to be the greatest limiting factor to recovery operations. CPC contractor, Center for Toxicology and Environmental Health, LLC (CTEH), remain on site providing air monitoring services. CTEH continues monitoring air quality in the work zones and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excessive benzene and LEL readings. Today's VOC exceedance levels range from 0 – 1,351.3 (Pond 2a compressor) parts per million (ppm). The exceedances from benzene range 0.05-3 (release site) ppm. LEL exceedance levels range from 0%-10% (Release site).

CPC has managed to recover approximately 286,481 gallons of fuel and 233,228 gallons of mixed oil/water to date.

CPC performed an mass balance calculation and determined an estimated volume of 252,000 gallons of fuel was discharged. That number has been revised to an estimated 336,000 gallons. They estimate 200,705 gallons of fuel evaporated as of 9/16/16. These numbers are approximate and CPC will perform a final mass balance after product recovery activities are complete.

Diversions designed for Pond 3 include a weir and two underflow dams (at the Pond outfall). CPC continues to monitor Pond 3. No oil sheening has been seen along the shoreline on Pond 3. Unified Command (UC) will be notified if any petroleum is observed. OSC Garrard, along with the Gulf Strike Team (GST) and CPC personnel identified additional locations along Peel Creek for potential placement of an additional underflow dam. CPC has agreed to reserve material to construct these features. CPC has estimated a 10-hour construction time for this final structure. To facilitate access, CPC completed construction of an access road along the entire length of Peel Creek.

No adverse weather impacts are expected for the next operational period.

EPA/GST remain incorporated into Operations Section and air monitoring activities. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

Kerisa Coleman is representing EPA in the Joint Information Center (JIC).

The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

Two START members continue the collection of split surface water samples with CPC

and conducting oversight of air monitoring activities. Split samples were collected from Pond 3 and confluence of Peel Creek and Cahaba River. In additional, a third START is providing ICS support.

EPA approved the vapor suppression plan and evacuation plan; subsequently, excavation in the area of the damaged pipe began at 1530 this afternoon. Local firefighters used a vapor suppressant agent during excavation activities.

Product recovery operations continue in Pond 2 at two points, southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily used drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to 4 storage tanks at staging 2b. There are 2 storage tanks at staging 2a where they are recovering product from recovery point 2a.

There are currently 14 storage tanks at the main staging area. Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

There are approximately 721 response worker onsite.

The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, four mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it.

A Regional Response Team (RRT4) call was held today to update RRT4 members.

See https://helena.colonialresponse.com/ for information on related to restoration of service.

PLANNED RESPONSE ACTIVITIES

The EPA OSC has requested that START collect additional surface water samples with the Cahaba Riverkeeper. START will collect the samples during the next operational period. START and OSC Stilman will continue to monitor CPC's sampling and monitoring efforts. The following activities remain unchanged and continue during the response efforts:

∀ Continue to participate in UC

∀ Monitor removal activities

∀ Monitor safety air monitoring

∀ Participate in the Joint Information Center

 \forall Prepare for and coordinate a transition to a removal phase

∀ Preform water sampling

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | <u>epaosc.org</u>

To:

Webster, James[Webster.James@epa.gov]

Cc:

Harper, Greg[Harper.Greg@epa.gov]; Eichinger, Kevin[Eichinger.Kevin@epa.gov]

From:

Moore, Tony

Sent:

Sat 9/17/2016 12:10:29 AM

Subject: Re: SITREP #7 - Pelham Pipeline Spill

Thanks, I was arranging to have an amended sitrep distributed

Sent from my iPhone

On Sep 16, 2016, at 8:05 PM, Webster, James < Webster.James@epa.gov > wrote:

Put the waiver stuff in morning special ERNS

Sent from my iPhone

On Sep 16, 2016, at 8:03 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #7

1800 CDT, September 16, 2016

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CURRENT OPERATIONS

A 6-inch pipe was observed discharging water from Pond 3; however flow was restricted and likely due to a blockage. CPC has installed a plug in the pipe to reduce the potential of petroleum impacted water being released.

The elevated benzene and LEL continue to be the greatest limiting factor to recovery operations. CPC contractor, Center for Toxicology and Environmental Health, LLC (CTEH), remain on site providing air monitoring services. CTEH continues monitoring air quality in the work zones and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excessive benzene and LEL readings. Today's VOC exceedance levels range from 0 – 1,351.3 (Pond 2a compressor) parts per million (ppm). The exceedances from benzene range 0.05-3 (release site) ppm. LEL exceedance levels range from 0% - 10% (Release site).

CPC has managed to recover approximately 286,481gallons of fuel and 233,228 gallons of mixed oil/water to date.

CPC performed a mass balance calculation and determined an estimated volume of 252,000 gallons of fuel was discharged. That number has been revised to an estimated 336,000 gallons. They estimate 200,705 gallons of fuel evaporated as of 9/16/16. These numbers are approximate and CPC will perform a final mass balance after product recovery activities are complete.

Diversions designed for Pond 3 include a weir and two underflow dams (at the Pond outfall). CPC continues to monitor Pond 3. No oil sheening has been seen along the shoreline on Pond 3. Unified Command (UC) will be notified if any petroleum is observed. OSC Garrard, along with the Gulf Strike Team (GST) and CPC personnel identified additional locations along Peel Creek for potential placement of an additional underflow dam. CPC has agreed to reserve material to construct these features. CPC has estimated a 10-hour construction time for this final structure. To facilitate access, CPC completed construction of an access road along the entire length of Peel Creek.

No adverse weather impacts are expected for the next operational period.

EPA/GST remain incorporated into Operations Section and air monitoring activities. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

Kerisa Coleman is representing EPA in the Joint Information Center (JIC).

The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

Two START members continue the collection of split surface water samples with CPC and conducting oversight of air monitoring activities. Split samples were collected from Pond 3 and confluence of Peel Creek and Cahaba River. In additional, a third START is providing ICS support.

EPA approved the vapor suppression plan and evacuation plan; subsequently, excavation in the area of the damaged pipe began at 1530 this afternoon. Local firefighters used a vapor suppressant agent during excavation activities.

Product recovery operations continue in Pond 2 at two points, southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily used drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to 4 storage tanks at staging 2b. There are 2 storage tanks at staging 2a where they are recovering product from recovery point 2a.

There are currently 14 storage tanks at the main staging area. Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

There are approximately 721 response worker onsite.

The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, four mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it.

A Regional Response Team (RRT4) call was held today to update RRT4 members.

See https://helena.colonialresponse.com/ for information on related to restoration of service.

PLANNED RESPONSE ACTIVITIES

The EPA OSC has requested that START collect additional surface water samples with the Cahaba Riverkeeper. START will collect the samples during the next operational period. START and OSC Stilman will continue to monitor CPC's sampling and monitoring efforts. The following activities remain unchanged and continue during the response efforts:

- ∀ Continue to participate in UC
- ∀ Monitor removal activities
- ∀ Monitor safety air monitoring
- \forall Participate in the Joint Information Center
- \forall Prepare for and coordinate a transition to a removal phase

∀ Preform water sampling

To:

Harper, Greg[Harper.Greg@epa.gov]

Cc:

Webster, James[Webster.James@epa.gov]; Eichinger, Kevin[Eichinger.Kevin@epa.gov]

Moore, Tony From:

Sent:

Sat 9/17/2016 12:15:24 AM

Subject: Re: SITREP #7 - Pelham Pipeline Spill

Let's wait till the morning to avoid confusion. Greg will you add the waiver language to the morning ERNS

Sent from my iPhone

On Sep 16, 2016, at 8:12 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Sorry Jim I was getting all the recipients into the email when your email conversation came through.

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Webster, James

Sent: Friday, September 16, 2016 8:06 PM

To: Harper, Greg < Harper.Greg@epa.gov >; Moore, Tony < moore.tony@epa.gov >;

Eichinger, Kevin < Eichinger.Kevin@epa.gov > Subject: Re: SITREP #7 - Pelham Pipeline Spill

Put the waiver stuff in morning special ERNS

Sent from my iPhone

On Sep 16, 2016, at 8:03 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #7

1800 CDT, September 16, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to CPC was made by a state mining inspector; however no volume estimate was provided at the time. CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons – 336,000 gallons).

The local fire department responded and established a secured zone around the spill site. Local responders detected hazardous conditions due to potentially explosive vapor concentration around the spill location. Shelby County Emergency Management responded and confirmed that no public or private drinking water sources are currently threatened by the spill.

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

CPC confirmed that the impacted transmission line is shut down. Environmental contractors for CPC are on site to conduct air monitoring and remediation activities. Delays to remediate the spill routinely occur due to elevated concentrations of volatile organic compounds (VOC), specifically benzene, and explosive vapors exceeding the lower explosive limit (LEL).

EPA consulted with the Department of Interior (DOI) and the State of Alabama to identify threatened and endangered (T&E) species in the area of the spill. To EPA's knowledge, no impacts to T&E species have been reported at this time; however, field crews have noted minimal impacts to wildlife in the spill area.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, CPC, ADEM, and Shelby County. OSC Berry will demobilize on September 17, 2016. OSC Kevin Eichinger will assume EPA's position in Unified Command. OSC Garrard, OSC Tripp and four US Coast Guard Gulf Strike Team members remain deployed to assist with field observations. OSC Stilman remains deployed to assist in the Environmental Unit. Kerisa Coleman, a Region 4 public affairs specialist, arrived September 16, 2016 to assist in the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 6

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

A 6-inch pipe was observed discharging water from Pond 3; however flow was restricted and likely due to a blockage. CPC has installed a plug in the pipe to reduce the potential of petroleum impacted water being released.

The elevated benzene and LEL continue to be the greatest limiting factor to recovery operations. CPC contractor, Center for Toxicology and Environmental Health, LLC (CTEH), remain on site providing air monitoring services. CTEH continues monitoring air quality in the work zones and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excessive benzene and LEL readings. Today's VOC exceedance levels range from 0-1,351.3 (Pond 2a compressor) parts per million (ppm). The exceedances from benzene range 0.05-3 (release site) ppm. LEL exceedance levels range from 0%-10% (Release site).

CPC has managed to recover approximately 286,481gallons of fuel and 233,228 gallons of mixed oil/water to date.

CPC performed a mass balance calculation and determined an estimated volume of 252,000 gallons of fuel was discharged. That number has been revised to an estimated 336,000 gallons. They estimate 200,705 gallons of fuel evaporated as of 9/16/16. These numbers are approximate and CPC will perform a final mass balance after product recovery activities are complete.

Diversions designed for Pond 3 include a weir and two underflow dams (at the Pond outfall). CPC continues to monitor Pond 3. No oil sheening has been seen along the shoreline on Pond 3. Unified Command (UC) will be notified if any petroleum is observed. OSC Garrard, along with the Gulf Strike Team (GST) and CPC personnel identified additional locations along Peel Creek for potential placement of an additional underflow dam. CPC has agreed to reserve material to construct these features. CPC has estimated a 10-hour construction time for this final structure. To facilitate access, CPC completed construction of an access road along the entire length of Peel Creek.

No adverse weather impacts are expected for the next operational period.

EPA/GST remain incorporated into Operations Section and air monitoring activities. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

Kerisa Coleman is representing EPA in the Joint Information Center (JIC).

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EPA approved the vapor suppression plan and evacuation plan; subsequently, excavation in the area of the damaged pipe began at 1530 this afternoon. Local firefighters used a vapor suppressant agent during excavation activities.

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There are currently 14 storage tanks at the main staging area. Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

There are approximately 721 response worker onsite.

The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, four mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle)

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A Regional Response Team (RRT4) call was held today to update RRT4 members.

See https://helena.colonialresponse.com/ for information on related to restoration of service.

PLANNED RESPONSE ACTIVITIES

The EPA OSC has requested that START collect additional surface water samples with the Cahaba Riverkeeper. START will collect the samples during the next operational period. START and OSC Stilman will continue to monitor CPC's sampling and monitoring efforts. The following activities remain unchanged and continue during the response efforts:

- ∀ Continue to participate in UC
- ∀ Monitor removal activities
- ∀ Monitor safety air monitoring
- ∀ Participate in the Joint Information Center
- \forall Prepare for and coordinate a transition to a removal phase
- ∀ Preform water sampling

To:

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Sat 9/17/2016 11:33:06 PM

Subject: Re: Sitrep 8

,,,,,,,,,

Sent from my iPhone

On Sep 17, 2016, at 7:17 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Thanks

Sent from my iPhone

On Sep 17, 2016, at 7:16 PM, Eichinger, Kevin < <u>Eichinger.Kevin@epa.gov</u>> wrote:

Here's the text. We are including a map and pict so I will get you the doc shortly:

INCIDENT SUMMARY

On September 9, 2016, at 1359 hours CDT, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" below ground pipeline to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River).

CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons – 336,000 gallons).

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area. The nearest residential neighborhood and commercial area is located two miles from the spill location.

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OSC Chuck Berry integrated into Unified Command initially and demobilize on September 17, 2016. OSC Kevin Eichinger assumed EPA's position in Unified Command.

OSCs, the United States Coast Guard (USCG) Gulf Strike Team (GST) and the Superfund Technical Assessment and Response Team (START) are embedded in the

Operations Sections.

An OSC and START are embedded in the Environmental Unit.

EPA Public Affairs Specialist and a Public Information Officer are also assigned to the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 5

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

Total number of response Personnel: 739

CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate – 6000 bbl to 8000 bbls

Recovery/Loss to the Environment Volumes:

Fuel/Waste Recovery	Volume Since Last SITREP	Total Volume to Date
	200 gallons	85,976 gallons
Loss to the Environment due		229,040 gallons
to Evaporation		
Bond in the Soil	ТВО	TBD
Petroleum Contact Water		242,155 gallons

CURRENT OPERATIONS

1) Product Recovery and Removal

∀ A 6-inch pipe was observed discharging water from Pond 3; however, flow was restricted likely due to a blockage. CPC has installed a plug in the 6-inch pipe attached to Pond 3 to help reduce the potential of petroleum impacted water being released. The water level was measured before installation and 24-hours after installation of the plug. Installation of the plug caused the water level to rise approximately 1-inch.

∀ CPC continues to evaluate plugging the culvert between Pond 2 and Pond 3. They intend to send a camera in the area tomorrow to determine the best method to seal it.

∀ CPC completed the new soil staging area last night and moved the excavated pile (generated during the previous operational period) to the new location. EPA advised CPC to have a secondary storage area ready in the event additional soil is excavated.

∀ Elevated benzene and lower explosive limit (LEL) continues to hinder progress. Minimal excavation occurred overnight due to elevated LEL and benzene readings at the leak site. CPC has excavated an estimated 40 tons of soil. Local firefighters continued to use a vapor suppressant agent during excavation activities.

∀ Due to health and safety reasons, product recovery operations are shut down while excavation occurs at the leak site. As excavation activities break or suspend due to elevated LEL and benzene levels, product recovery operations resume in Pond 2. Product recovery occurs at two points, southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily used drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to 4 storage tanks at staging 2b. There are 2 storage tanks at staging 2a where they are recovering product from recovery point 2a. Excavation activities and elevated LEL and benzene levels limited product recover efforts today.

∀ Inclement weather caused activities to shut down for a period of time.

∀ Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

2) Environmental Sampling and Impacts

a. Air Monitoring

∀ Work interruptions continue due to excessive benzene and LEL readings. Today's VOC's peaked at 270 parts per million (ppm) at the 2a compressor; benzene peaked at 2.4 ppm at the release site; and LEL peaked at 26% at stopple 2.

 \forall Two START members continue to conduct oversight of air monitoring activities.

b. Surface Water

∀ Two START members continue to collect split surface water samples with CPC. Split samples were collected from the Cahaba River in coordination with the Cahaba River Keeper and CPC's environmental consultant. START was unable to collect split samples from Pond 3 and Peel Creek due to excavation at the leak site; however, CPC's environmental consultant had a crew in the area and was able to collect samples from this area. Preliminary EPA water sample data should be received tonight.

c. Wildlife Impacts

∀ The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, five mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have

not been able to get to it. No additional impacted wildlife was reported during this operation period.

3) Health and Safety Oversite

∀ EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

∀ The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

4) Restoration of Services

∀ CPC requested a waiver of the prohibition for commingling provisions are found in 40 C.F.R. § 80.78(a)(7) that prohibits any person from combining any reformulated gasoline blendstock for oxygenate blending with any other gasoline, blendstock, or oxygenate, unless certain conditions are met. The waiver request was issued on September 16, 2016 and will expire October 6, 2016.

∀ CPC continues to stage material and prepare for pushing the pig through the pipe to remove the remaining product. This process is anticipated to begin on Sunday afternoon and will be complete Monday morning.

∀ CPC continues to implement the plan to install an approximate 1,000 foot section of pipe to by-pass the leak site. This plan was developed with the input of Pipeline and Hazardous Materials Safety Agency (PHMSA). Once installed, the pipeline can resume service.

5) Remediation Planning

 \forall Plans continue to be developed and will be reviewed by IC when ready.

∀ The City of Helena operates the closest drinking water well. It is located approximately 5 miles for the release site. City Helena Utilities is conducting well water sampling for the constituents found in gasoline.

PLANNED RESPONSE ACTIVITIES

Inclement weather is expected again during the next operation period which may affect planned activities. The following activities are planned during the next operation period:

∀ Continue to participate in UC

∀ Monitor removal activities

∀ START will continue to collect additional split surface water samples with the CPC environmental contractor and the Cahaba Riverkeeper

∀ START will continue to monitor CPC's air monitoring efforts

∀ Monitor safety air monitoring

∀ Participate in the Joint Information Center

∀ Prepare for and coordinate a transition to a removal phase

∀ CPC will pre-stage oil containment booms on the Cahaba River

 \forall Install an additional underflow dam near the confluence of Peel Creek and the Cahaba River

∀ Pre-stage aeration equipment along Peel Creek.

∀ Complete pipeline bypass and restore service.

∀ Continue recovery of fuel from Pond 2

∀ Continue removal of fuel from the plugged pipeline

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

To:

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Sat 9/17/2016 11:33:37 PM

Subject: Re: Sitrep 8

,,,,,,,,,

Ignore that one

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Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

To:

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Sat 9/17/2016 11:49:08 PM

Subject: Re: Sitrep 8

Minor corrections made good to go

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CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons - 336,000 gallons).

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CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate - 6000 bbl to 8000 bbls

Recovery/Loss to the Environment Volumes:

Fuel/Waste Recovery	Volume Since Last SITREP	Total Volume to Date
	200 gallons	85,976 gallons
Loss to the Environment due to Evaporation	28,335 gallons	229,040 gallons
Bond in the Soil	TBD	TBD
Petroleum Contact Water		242,155 gallons

CURRENT OPERATIONS

1) Product Recovery and Removal

∀ A 6-inch pipe was observed to discharging water from Pond 3; however, flow was restricted likely due to a blockage. CPC has installed a plug in the 6-inch pipe to help reduce the potential of petroleum impacted water being released. The water level was measured before installation and 24-hours after installation of the plug. Installation of the plug caused the water level to rise approximately 1-inch.

∀ CPC continues to evaluate plugging the culvert between Pond 2 and Pond 3. They intend to send a camera in the area tomorrow to determine the best method to seal it.

∀ CPC completed the new soil staging area last night and moved the excavated pile (generated during the previous operational period) to the new location. EPA advised CPC to have a secondary storage area ready in the event additional soil is excavated.

∀ Elevated benzene and lower explosive limit (LEL) continue to hinder progress. Minimal excavation occurred overnight due to elevated LEL and benzene readings at the leak site. CPC has excavated an estimated 40 tons of soil. Local firefighters continued to use a vapor suppressant agent during excavation activities.

∀ Due to health and safety reasons, product recovery operations shut down while excavation occurs at the leak site. When excavation activities break or suspend due to elevated LEL and benzene levels, product recovery operations resume in Pond 2. Product recovery occurs at two points, the southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily use drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to four storage tanks at staging 2b. There are two storage tanks at staging 2a, recovering product from recovery point 2a. Excavation activities and elevated LEL and benzene levels limited product recover efforts today.

∀ Inclement weather caused activities to shut down for a period of time.

 \forall Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

2) Environmental Sampling and Impacts

a. Air Monitoring

∀ Work interruptions continue due to excessive benzene and LEL readings. Today's VOC's peaked at 270 parts per million (ppm) at the 2a compressor; benzene peaked at 2.4 ppm at the release site; and LEL peaked at 26% at stopple 2.

∀ Two START members continue to conduct oversight of air monitoring activities.

b. Surface Water

∀ Two START members continue to collect split surface water samples with CPC. Split samples were collected from the Cahaba River in coordination with the Cahaba River Keeper and CPC's environmental consultant. START was unable to collect split samples from Pond 3 and Peel Creek due to excavation at the leak site; however, CPC's environmental consultant had a crew in the area and was able to collect samples from this area. Preliminary EPA water sample data should be received tonight.

c. Wildlife Impacts

 \forall The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, five mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one

white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it. No additional impacted wildlife was reported during this operation period.

3) Health and Safety Oversite

∀ EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

∀ The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

4) Restoration of Services

∀ CPC requested a waiver of the prohibition for commingling provisions [found in 40 C.F.R. § 80.78(a)(7)] that prohibits any person from combining any reformulated gasoline blendstock for oxygenate blending with any other gasoline, blendstock, or oxygenate, unless certain conditions are met. The waiver request was issued on September 16, 2016 and will expire October 6, 2016.

∀ CPC continues to stage material and prepare for pushing the pig through the pipe to remove the remaining product. This process is anticipated to begin on Sunday afternoon and will be completed Monday morning.

∀ CPC continues to implement the plan to install an approximate 1,000 foot section of pipe to by-pass the leak site. This plan was developed with the input of Pipeline and Hazardous Materials Safety Agency (PHMSA). Once installed, the pipeline can resume service.

5) Remediation Planning

 \forall Plans continue to be developed and will be reviewed by IC when ready.

∀ The City of Helena operates the closest drinking water well. It is located approximately five miles for the release site. City Helena Utilities is conducting well water sampling for the constituents found in gasoline.

PLANNED RESPONSE ACTIVITIES

Inclement weather is expected again during the next operation period which may affect planned activities. The following activities are planned during the next operation period:

∀ Continue to participate in UC

- ∀ Monitor removal activities
- \forall START will continue to collect additional split surface water samples with the CPC environmental contractor and the Cahaba Riverkeeper
- ∀ START will continue to monitor CPC's air monitoring efforts
- ∀ Monitor safety air monitoring
- ∀ Participate in the Joint Information Center
- ∀ Prepare for and coordinate a transition to a removal phase
- ∀ CPC will pre-stage oil containment booms on the Cahaba River
- \forall Install an additional underflow dam near the confluence of Peel Creek and the Cahaba River
- ∀ Pre-stage aeration equipment along Peel Creek.
- ∀ Complete pipeline bypass and restore service.
- ∀ Continue recovery of fuel from Pond 2
- ∀ Continue removal of fuel from the plugged pipeline

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

To:

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent: Sat 9/17/2016 11:49:52 PM

Subject: Re: Sitrep 8

Incorporate yours into mine. Thanks and good job

Sent from my iPhone

On Sep 17, 2016, at 7:46 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Do you want me to forward my edits or incorporate my into your's?

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Moore, Tony

Sent: Saturday, September 17, 2016 7:34 PM To: Harper, Greg < Harper. Greg@epa.gov >

Subject: Re: Sitrep 8

Ignore that one

Sent from my iPhone

On Sep 17, 2016, at 7:17 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Thanks

Sent from my iPhone

On Sep 17, 2016, at 7:16 PM, Eichinger, Kevin < <u>Eichinger.Kevin@epa.gov</u>> wrote:

Here's the text. We are including a map and pict so I will get you the doc shortly:

INCIDENT SUMMARY

On September 9, 2016, at 1359 hours CDT, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" below ground pipeline to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River).

CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons – 336,000 gallons).

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area. The nearest residential neighborhood and commercial area is located two miles from the spill location.

INCIDENT MANAGEMENT AND STAFFING

OSC Chuck Berry integrated into Unified Command initially and demobilize on September 17, 2016. OSC Kevin Eichinger resumed EPA's position in Unified Command.

OSCs, the United States Coast Guard (USCG) Gulf Strike Team (GST) and the Superfund Technical Assessment and Response Team (START) are embed in the Operations Sections.

An OSC and START are embed in the Environmental Unit.

EPA Public Affairs Specialist and a Public Information Officer are also assigned to the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 5

Current number of United States Coast Guard Gulf Strike Team (USCG GST)
Members: 4

Current number START Personnel: 3

Total number of response Personnel: 739

CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate - 6000 bbl to 8000 bbls

Recovery/Loss to the Environment Volumes:

Fuel/Waste Recovery Volume Since Last SITREP Total Volume to Date

Recovered from Pond #2 200 gallons 85,976 gallons Loss to the Environment due 28,335 gallons 229,040 gallons

to Evaporation

Bond in the Soil TBD TBD

Petroleum Contact Water 242,155 gallons

CURRENT OPERATIONS

1) Product Recovery and Removal

∀ A 6-inch pipe was observed to discharge water from Pond 3; however, flow was restricted likely due to a blockage. CPC has installed a plug in the 6-inch pipe attached to Pond 3 to help reduce the potential of petroleum impacted water being released. The water level was measured before installation and 24-hours after installation of the plug. Installation of the plug caused the water level to rise approximately 1-inch.

 \forall CPC continues to evaluate plugging the culvert between Pond 2 and Pond 3. They intend to send a camera in the area tomorrow to determine the best method to seal it.

∀ CPC completed the new soil staging area last night and moved the excavated pile (generated during the previous operational period) to the new location. EPA advised CPC to have a secondary storage area ready in the event additional soil is excavated.

∀ Elevated benzene and lower explosive limit (LEL) continues to hinder progress. Minimal excavation occurred overnight due to elevated LEL and benzene readings at the leak site. CPC has excavated an estimated 40 tons of soil. Local firefighters continued to use a vapor suppressant agent during excavation activities.

∀ Due to health and safety reasons, product recovery operations shut down while excavation occurs at the leak site. As excavation activities break or suspend due to elevated LEL and benzene levels, product recovery operations resume in Pond 2. Product recovery occurs at two points, southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily used drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to 4 storage tanks at staging 2b. There are 2 storage tanks at

staging 2a where they are recovering product from recovery point 2a. Excavation activities and elevated LEL and benzene levels limited product recover efforts today.

 \forall Inclement weather caused activities to shut down for a period of time.

∀ Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

2) Environmental Sampling and Impacts

a. Air Monitoring

∀ Work interruptions continue due to excessive benzene and LEL readings. Today's VOC's peaked at 270 parts per million (ppm) at the 2a compressor; benzene peaked at 2.4 ppm at the release site; and LEL peaked at 26% at stopple 2.

∀ Two START members continue to conduct oversight of air monitoring activities.

b. Surface Water

∀ Two START members continue to collect split surface water samples with CPC. Split samples were collected from the Cahaba River in coordination with the Cahaba River Keeper and CPC's environmental consultant. START was unable to collect split samples from Pond 3 and Peel Creek due to excavation at the leak site; however, CPC's environmental consultant had a crew in the area and was able to collect samples from this area. Preliminary EPA water sample data should be received tonight.

c. Wildlife Impacts

∀ The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, five mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it. No additional impacted wildlife was reported during this operation period.

3) Health and Safety Oversite

∀ EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

 \forall The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

4) Restoration of Services

∀ CPC requested a waiver of the prohibition for commingling provisions are found in 40 C.F.R. § 80.78(a)(7) that prohibits any person from combining any reformulated gasoline blendstock for oxygenate blending with any other gasoline, blendstock, or oxygenate, unless certain conditions are met. The waiver request was issued on September 16, 2016 and will expire October 6, 2016.

∀ CPC continues to stage material and prepare for pushing the pig through the pipe to remove the remaining product. This process is anticipated to begin on Sunday afternoon and will be complete Monday morning.

 \forall CPC continues to implement the plan to install an approximate 1,000 foot section of pipe to by-pass the leak site. This plan was developed with the input of Pipeline and Hazardous Materials Safety Agency (PHMSA). Once installed, the pipeline can resume service.

5) Remediation Planning

∀ Plans continue to be developed and will be reviewed by IC when ready.

 \forall The City of Helena operates the closest drinking water well. It is located approximately 5 miles for the release site. City Helena Utilities is conducting well water sampling for the constituents found in gasoline.

PLANNED RESPONSE ACTIVITIES

Inclement weather is expected again during the next operation period which may affect planned activities. The following activities are planned during the next operation period:

∀ Continue to participate in UC

∀ Monitor removal activities

 \forall START will continue to collect additional split surface water samples with the CPC environmental contractor and the Cahaba Riverkeeper

∀ START will continue to monitor CPC's air monitoring efforts

∀ Monitor safety air monitoring

- ∀ Participate in the Joint Information Center
- ∀ Prepare for and coordinate a transition to a removal phase
- ∀ CPC will pre-stage oil containment booms on the Cahaba River
- ∀ Install an additional underflow dam near the confluence of Peel Creek and the Cahaba River
- \forall Pre-stage aeration equipment along Peel Creek.
- \forall Complete pipeline bypass and restore service.
- ∀ Continue recovery of fuel from Pond 2
- \forall Continue removal of fuel from the plugged pipeline

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

To:

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Sun 9/18/2016 12:15:19 AM

Subject: Re: SITREP #8 - Pelham Pipeline Spill

Add the waiver info I sent earlier

Sent from my iPhone

On Sep 17, 2016, at 8:13 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #8

1800 CDT, September 17, 2016

INCIDENT SUMMARY

On September 9, 2016, at 1359 hours CDT, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" below ground pipeline to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River).

CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8,000 bbls (252,000 gallons - 336,000 gallons).

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area. The nearest residential neighborhood and commercial area is located two miles from the spill location.

INCIDENT MANAGEMENT AND STAFFING

OSC Chuck Berry integrated into Unified Command initially and demobilize on September 17, 2016. OSC Kevin Eichinger assumed EPA's position in Unified Command

OSCs, the United States Coast Guard (USCG) Gulf Strike Team (GST) and the Superfund Technical Assessment and Response Team (START) are embed in the Operations Sections.

An OSC and START are embed in the Environmental Unit.

EPA Public Affairs Specialist and a Public Information Officer are also assigned to the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 5

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

Total number of response Personnel: 739

CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate - 6,000 bbl to 8,000 bbls

Recovery/Loss to the Environment Volumes:

Fuel/Waste Recovery Recovered from Pond #2 Loss to the Environment due	Volume Since Last SITREP 200 gallons 28,335 gallons	Total Volume to Date 85,976 gallons 229,040 gallons
to Evaporation Bond in the Soil Petroleum Contact Water	TBD	TBD 242,155 gallons

CURRENT OPERATIONS

1) Product Recovery and Removal

∀ A 6-inch pipe was observed to discharging water from Pond 3; however, flow was restricted likely due to a blockage. CPC has installed a plug in the 6-inch pipe to help reduce the potential of petroleum impacted water being released. The water level was measured before installation and 24-hours after installation of the plug. Installation of the plug caused the water level to rise approximately 1-inch.

∀ CPC continues to evaluate plugging the culvert between Pond 2 and Pond 3. They intend to send a camera in the area tomorrow to determine the best method to seal it.

∀ CPC completed the new soil staging area last night and moved the excavated pile (generated during the previous operational period) to the new location. EPA advised CPC to

have a secondary storage area ready in the event additional soil is excavated.

∀ Elevated benzene and lower explosive limit (LEL) continue to hinder progress. Minimal excavation occurred overnight due to elevated LEL and benzene readings at the leak site. CPC has excavated an estimated 40 tons of soil. Local firefighters continued to use a vapor suppressant agent during excavation activities.

∀ Due to health and safety reasons, product recovery operations shut down while excavation occurs at the leak site. When excavation activities break or suspend due to elevated LEL and benzene levels, product recovery operations resume in Pond 2. Product recovery occurs at two points, the southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily use drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to four storage tanks at staging 2b. There are two storage tanks at staging 2a, recovering product from recovery point 2a. Excavation activities and elevated LEL and benzene levels limited product recover efforts today.

∀ Inclement weather caused activities to shut down for a period of time.

∀ Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

2) Environmental Sampling and Impacts

a. Air Monitoring

∀ Work interruptions continue due to excessive benzene and LEL readings. Today's VOC's peaked at 270 parts per million (ppm) at the 2a compressor; benzene peaked at 2.4 ppm at the release site; and LEL peaked at 26% at stopple 2.

∀ Two START members continue to conduct oversight of air monitoring activities.

b. Surface Water

∀ Two START members continue to collect split surface water samples with CPC. Split samples were collected from the Cahaba River in coordination with the Cahaba River Keeper and CPC's environmental consultant. START was unable to collect split samples from Pond 3 and Peel Creek due to excavation at the leak site; however, CPC's environmental consultant had a crew in the area and was able to collect samples from this area.

∀ Preliminary EPA water sample data should be received tonight.

c. Wildlife Impacts

∀ The CPC environmental consultant is responsible for identifying and documenting

impacted wildlife. To date, five mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able collect it. No additional impacted wildlife was reported during this operation period.

3) Health and Safety Oversite

∀ EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress.

∀ Two GST members continue to observe night operations.

∀ The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

4) Restoration of Services

∀ CPC requested a waiver of the prohibition for commingling provisions [found in 40 C.F.R. § 80.78(a)(7)] that prohibits any person from combining any reformulated gasoline blendstock for oxygenate blending with any other gasoline, blendstock, or oxygenate, unless certain conditions are met. The waiver request was issued on September 16, 2016 and will expire October 6, 2016.

∀ CPC continues to stage material and prepare for pushing the pig through the pipe to remove the remaining product. This process is anticipated to begin on Sunday afternoon and will be completed Monday morning.

∀ CPC continues to implement the plan to install an approximate 1,000 foot section of pipe to by-pass the leak site. This plan was developed with the input of Pipeline and Hazardous Materials Safety Agency (PHMSA). Once installed, the pipeline can resume service.

5) Remediation Planning

 \forall Plans continue to be developed and will be reviewed by IC when ready.

∀ The City of Helena operates the closest drinking water well. It is located approximately five miles for the release site. City Helena Utilities is conducting well water sampling for the constituents found in gasoline.

PLANNED RESPONSE ACTIVITIES

Inclement weather is expected again during the next operation period which may affect planned activities. The following activities are planned during the next operation period:

∀ Continue to participate in UC

∀ Monitor removal activities

 \forall START will continue to collect additional split surface water samples with the CPC environmental contractor and the Cahaba River Keeper

 \forall START will continue to monitor CPC's air monitoring efforts

 \forall Participate in the Joint Information Center

 \forall Prepare for and coordinate a transition to a removal phase

∀ CPC will pre-stage oil containment booms on the Cahaba River

 \forall Install an additional underflow dam near the confluence of Peel Creek and the Cahaba River

∀ Pre-stage aeration equipment along Peel Creek.

 \forall Complete pipeline bypass and restore service.

 \forall Continue recovery of fuel from Pond 2

∀ Continue removal of fuel from the plugged pipeline

To:

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Mon 9/19/2016 12:00:56 AM

Subject: Re: SITREP 9

,,,,,,,,,

No changes

Sent from my iPhone

On Sep 18, 2016, at 7:55 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Any changes? If so I will use your text.

Sent from my iPhone

On Sep 18, 2016, at 7:50 PM, Moore, Tony <moore.tony@epa.gov> wrote:

Check it and send it on

Sent from my iPhone

On Sep 18, 2016, at 7:20 PM, Eichinger, Kevin < <u>Eichinger.Kevin@epa.gov</u>> wrote:

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #9

1800 CDT, September 18, 2016

INCIDENT SUMMARY

On September 9, 2016, at 1359 hours CDT, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" below ground pipeline to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River).

CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8,000 bbls (252,000 gallons – 336,000 gallons).

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama.

INCIDENT MANAGEMENT AND STAFFING

OSC Kevin Eichinger remains integrated into Unified Command.

OSCs, the United States Coast Guard (USCG) Gulf Strike Team (GST) and the Superfund Technical Assessment and Response Team (START) are embed in the Operations Sections.

START is embedded in the Environmental Unit.

EPA Public Affairs Specialist and a Public Information Officer are also assigned to the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

Total number of response Personnel: 743

CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate - 6,000 bbl to 8,000 bbls

Recovery/Loss to the Environment Volumes:

Fuel/Waste Recovery Recovered from Pond #2 Loss to the Environment due	10 mo topolico	Total Volume to Date 85,976 gallons* 257,375 gallons
to Evaporation Bond in the Soil Petroleum Contact Water Petroleum Contaminated Soil		TBD 242,155 gallons* 40 tons

Notes:

* Product recovery activities did occur this operational period. Crews were unable to provide product recovery number before the 1600 meeting.

CURRENT OPERATIONS

1) Product Recovery and Removal

 \forall OSC Eichinger participated in an overflight and assessed the Cahaba River and site operations. No sheen was observed on the Cahaba.

∀ Crews continues to evaluate plugging the culvert between Pond 2 and Pond 3. OSC Garrard oversaw and provided support as they sent a camera in the area to determine the best method to seal it; however, the camera was unable to find the culvert. Unified Command will explore other methods to look for it.

 \forall OSC Garrard is working with Operations to evaluate potential options for controlling source material at leak site prior to discharging to Pond 2.

 \forall A fuel/water mixture continues to drain out of the leak site to Pond 2. As of this morning, the quantity has been reduced to approximately 1 quart per minute. The fuel to water ratio is estimated at 20%, respectively.

 \forall Visual observations indicate gasoline on Pond 2 covers approximately one third of the pond and thickness to be approximately 1-inch, where it pooled (see photo below).

∀ Operations continued to recover product from Pond 2. Product recovery occurred at two points, the southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). Skimmers capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to four storage tanks at staging 2b. There are two storage tanks at staging 2a, to contain recovered product in that area. This evening, Boom was placed across Pond 2 to keep the pooled product in the northeast portion of the pond contained in that area.

∀ Pipeline draining activities continue at stopple 2.

∀ Excavation did not occur during this reporting period.

 \forall Inclement weather caused activities to shut down for a period of time this morning.

 \forall Installation of an additional underflow dam in Peel Creek, approximately 200 feet southeast of the Cahaba River is progressing. Operations anticipates completion tomorrow.

2) Environmental Sampling and Impacts

a. Air Monitoring

∀ Work interruptions continue due to excessive benzene and LEL readings. Today's VOC's peaked at 768 parts per million (ppm) at the 2a recovery; benzene peaked at 5.7 ppm at the 2a recovery; and LEL peaked at 8% at stopple 2.

∀ One START member continues to conduct oversight of air monitoring activities.

h. Surface Water

∀ One START member continues to collect split surface water samples with CPC. START obtained split samples from Pond 3, Peel Creek, and the Cahaba River in coordination with the Cahaba River Keeper and CPC's environmental consultant.

∀ An EPA OSC and START kayaked the Cahaba River from the confluence of the with Peel Creek to approximately 2 miles down streams. Water samples were collected. No sheen was observed on the River.

∀ EPA received preliminary water sample data for September 16 and 17, 2016. Laboratory analytical results reveal the presence of site specific constituents in concentrations similar to CPC's data. The surface water sample collected at the confluence of Peel Creek and the Cahaba River on September 16, 2016 contained total petroleum hydrocarbon (TPH) gasoline range organics (GRO) at an estimated concentration of 0.064 milligrams per kilogram (mg/kg). This detection is low and may not be related to the spill. Subsequent sampling at this location did not identify site specific constituents above the laboratory reporting limit. EPA will continue to collect surface water samples in the area and monitor for any changes.

∀ The sample collected at this location the following day did not detect any site specific constituents above the laboratory reporting limit.

c. Wildlife Impacts

∀ The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. During this operation period, teams identified one dead otter, one dead duck, and three dead turtles. Federal Fish and Wildlife visited the site to identify the duck species and determined it was a hen wood duck.

∀ To date, seven mammals including a rabbit, two raccoons, one fox, one coyote,

one otter, and one armadillo have been impacted; four reptiles (turtle) has been impacted; and two birds (a duck and one white bird) have been impacted. The white bird remains in a restricted area and teams have not been able collect it; however, it is assumed to be an egret.

3) Health and Safety Oversite

∀ EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress.

∀ Two GST members continue to observe night operations.

∀ The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

4) Restoration of Services

 \forall CPC continues to stage material and prepare for pushing the pig through the pipe to remove the remaining product. Operation is currently planned for the next operational period (tomorrow, 9/19/2016)

 \forall CPC continues to implement the plan to install an approximate 1,000-foot section of pipe to by-pass the leak site. This plan was developed with the input of Pipeline and Hazardous Materials Safety Agency (PHMSA). Once installed, the pipeline can resume service.

∀ Crews continue work to excavate and level the route for the bypass line and stage pipe. CPC has reported in the media that pipeline service will be restored by September 23, 2016.

5) Remediation Planning

∀ Plans continue to be developed and will be reviewed by UC when ready.

 \forall CPC is working to identify livestock access and potential use of the Cahaba River for crop irrigation.

6) Emergency Fuel Waiver

∀ CPC requested a waiver of the prohibition for commingling provisions [found in 40 C.F.R. § 80.78(a)(7)] that prohibits any person from combining any reformulated gasoline blendstock for oxygenate blending with any other gasoline, blendstock, or oxygenate, unless certain conditions are met. The waiver request was issued on September 16, 2016 and will expire October 6, 2016, EPA issued

an emergency fuel waiver of the reformulated gasoline (RFG) requirements in Alabama, Delaware, Georgia, Kentucky, Maryland, Mississippi, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and the District of Columbia. If there is any change or addition to the waiver status it will be noted in the SITREP.

PLANNED RESPONSE ACTIVITIES

Inclement weather may impact night ops but is not expected during the next operation period. The following activities are planned during the next operation period:

- ∀ Continue to participate in UC
- ∀ Monitor removal activities
- ∀ START will continue to collect additional split surface water samples with the CPC environmental contractor and the Cahaba River Keeper. Water samples will be collected from Pond #2.
- ∀ START will continue to monitor CPC's air monitoring efforts
- ∀ Participate in the Joint Information Center
- \forall Prepare for and coordinate a transition to a removal phase
- ∀ CPC will pre-stage oil containment booms on the Cahaba River
- ∀ Continue to install the additional underflow dam near the confluence of Peel Creek and the Cahaba River
- ∀ Pre-stage aeration equipment along Peel Creek.
- \forall Complete pipeline bypass and restore service.
- ∀ Continue recovery of fuel from Pond 2
- ∀ Continue removal of fuel from the plugged pipeline
- ∀ The FAA will be contacted to extend the no-fly over the site

SITUATIONAL REFERENCE MATERIAL

Aerial photographic taken today. Pond #3 is on the left; Pond #2 is on the right. Fuel has been confined to the upper 1/3 of the pond.

Overview of EPA Surface Water Sampling Locations

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

To: Moore, Tony[moore.tony@epa.gov]

From: Harper, Greg

Sent: Fri 9/16/2016 12:22:29 AM

Subject: SITREP #6



NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #6

1800 CDT, September 15, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by a state mining inspector, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has since been updated in NRC Reports to 252,000 gallons – See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) and EPA have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of explosive vapors and

volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Consult with the Department of Interior and the State of Alabama identified threatened and endangered (T&E) species in the area of the spill. However, no T&E species have been reported impacted from the spill, although several common species have been impacted.

The appropriate members were engaged during the initial response notification process. The following members were part of the initial notification: ADEM; Department of the Interior (DOI); and United States Environmental Protection Agency (USEPA). A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Garrard, OSC Tripp and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. OSC Stilman has been deployed to assist with Incident Command. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

Both stopples are in place. Colonial has ceased recovering product from the line as the nitrogen displacement has reached its maximum efficacy. Colonial has developed a displacement plan to use water to displace the remained of the fuel. Activities for this operations are estimated to be ready Saturday. Fuel continues to leak from the break, but at a much reduced rate.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remains on site providing air monitoring services. CTEH continues monitoring the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excess benzene and LEL readings. Today's VOC exceedance levels range from 30 - 2,699 parts per million (ppm). The exceedances from benzene range 0.6 - 18 ppm. LEL exceedance levels range from 10% - 196%.

Colonial has managed to remove approximately 233,614 gallons of liquid from Pond 2. Of that

volume 58,461 gallons of fuel has been recovered and 175,531 gallons of mixed oil/water remain in frac tanks.

Colonial has performed an initial mass balance calculation and determined an estimated volume of 252,000 gallons of fuel was discharged. They are estimating 180,634 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the pond outfall. Colonial continues to monitor Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. OSC Garrard, OPS, was on site in the morning exploring areas along Peel Creek with GST and Colonial personnel for potential placement of an additional underflow dam. Additional locations were identified, and Colonial has agreed to reserve the material to construct these. Additionally Colonial has estimated a 10-hour construction time for this final structure. To facilitate access, Colonial is building an access road along the entire length of Peel Creek.

No adverse weather impacts are expected from the tropical system off the coast of Georgia.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

James Pickney remains integrated with the JIC. One CIC is mobilizing to the site tomorrow. OSC Berry provided one telephone interview to the local NBC affiliate this afternoon.

The fire chief deemed the transfer of product from the pipeline to frac tanks was too high-risk, therefore operations changed to direct tanker to tanker trucks. Scrubbers were used on the vacuum trucks while the vacuum trucks pumped product from the pipeline to the transport tanker trucks to reduce the gasoline vapors. The tanker trucks are making a round trip to Colonial's Pelham Junction facility to off-load.

The Federal Aviation Administration continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

OSC Tripp was on-site performing an observation of all operation areas with GST most of the day.

The county sheriff's office was patrolling the site air space by helicopter to enforce the air restriction put in place by the FAA. During the night there was a drone being flown over the site by an unknown drone operator.

Two START members arrived on-scene to assist with surface water and sediment sampling operations. OSC Stilman mobilized in this morning as the Deputy IC for EPA and provided comments to the Surface water and sediment sampling plan. An additional START member is mobilizing in tonight to provide ICS support.

Work-site operations were ceased overnight due to increased VOCs, LEL, and benzene levels from 0230-0500. A temporary site-wide evacuation was ordered at 0300 due to elevated levels at the main staging area. Operations at the Stopples and the pond did not commence until 0830. Vapor scrubber units were switched out for a liquid vapor scrubber unit. Due to high LEL the Unified Command has developed a Vapor Suppression Plan and a Site Evacuation Plan. Vapor suppression foam, F-500, will be used to allow for the soil excavation around the pipeline to continue.

Recovery operations are occurring at two points 2a and 2b. Vacuum trucks from 2b are transferring recovered product to 4 frac tanks at staging 2b. There are 2 frac tanks at staging 2a where they are recovering product from recovery point 2a.

There are currently 14 frac tanks at the main staging area. Visual observations indicate gasoline thickness on pond 2 to be 1-1.5 inches at recovery point 2b, less than 0.10 inch at recovery point 2a.

Colonial is implementing a backup plan for restoration of service by constructing a bypass around the leak. The use of this will be determined by the difficulties found during the success and timing of the water displacement plan and excavation of the break. Colonial has given a tentative restoration time of late next week.

PLANNED RESPONSE ACTIVITIES

Due to the ongoing response efforts and unknown timelines, the EPA OSC made a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

The EPA OSC has requested an additional START contractors to assist with Incident Command Post Operations. START and OSC Stilman will continue to monitor Colonial Pipeline's sampling and monitoring efforts.

- ∀ Continue to participate in UC
- ∀ Monitor removal activities
- ∀ Monitor safety air monitoring
- ∀ Participate in the Joint Information Center
- \forall Prepare for and coordinate a transition to a removal phase
- ∀ Preform water sampling
- ∀ Finalize Surface Water and Sediment Sampling Plan
- ∀ Finalize Vapor Suppression Plan

 \forall Finalize Site Evacuation Plan

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

To:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Fri 9/16/2016 11:04:00 PM

Subject: Fwd: SITREP #7

Pelham Pipeline Spill SITREP 7 09162016 DRAFT.docx

ATT00001.htm

,,,,,,,,, Tony,

I have not read this yet, I have a spill notification I have to work. If you will read and edit I will send it out to everyone.

Thank you, Greg

Sent from my iPhone

Begin forwarded message:

From: "Eichinger, Kevin" < Eichinger. Kevin@epa.gov>

Date: September 16, 2016 at 6:48:23 PM EDT To: "Harper, Greg" < Harper. Greg@epa.gov>

Subject: SITREP #7

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to CPC was made by a state mining inspector; however no volume estimate was provided at the time. CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons - 336,000 gallons).

The local fire department responded and established a secured zone around the spill site. Local responders detected hazardous conditions due to potentially explosive vapor concentration around the spill location. Shelby County Emergency Management responded and confirmed that no public or private drinking water sources are currently threatened by the spill.

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

CPC confirmed that the impacted transmission line is shut down. Environmental contractors for CPC are on site to conduct air monitoring and remediation activities. Delays to remediate the spill routinely occur due to elevated concentrations of volatile organic compounds (VOC), specifically benzene, and explosive vapors exceeding the lower explosive limit (LEL).

EPA consulted with the Department of Interior (DOI) and the State of Alabama to identify threatened and endangered (T&E) species in the area of the spill. To EPA's knowledge, no impacts to T&E species have been reported at this time; however, field crews have noted minimal impacts to wildlife in the spill area.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, CPC, ADEM, and Shelby County. OSC Berry will demobilize on September 17, 2016. OSC Kevin Eichinger will resume EPA's position in Unified Command. OSC Garrard, OSC Tripp and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. OSC Stilman remains deployed to assist in the Environmental Unit. Kerisa Coleman, a public affairs specialist, arrived September 16, 2016 to assist in the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 6

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

A 6-inch pipe was observed to discharge water from Pond 3; however flow was restricted and likely due to a blockage. CPC has installed a plug in the 6-inch pipe attached to Pond 3 to help reduce the potential of petroleum impacted being released.

The elevated benzene and LEL continue to be the greatest limiting factor to recovery operations. CPC contractor, Center for Toxicology and Environmental Health, LLC (CTEH), remain on site providing air monitoring services. CTEH continues monitoring air quality in the work and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain

as previously established. Work interruptions continue due to excessive benzene and LEL readings. Today's VOC exceedance levels range from 0-1,351.3 (Pond 2a compressor) parts per million (ppm). The exceedances from benzene range 0.05-3 (release site) ppm. LEL exceedance levels range from 0% - 10% (Release site).

CPC has managed to recover approximately 286,481 gallons of fuel and 233,228 gallons of mixed oil/water to date.

CPC performed an initial mass balance calculation and determined an estimated volume of 252,000 gallons of fuel was discharged. That number has been revised to an estimated 336,000 gallons. They estimate 200,705 gallons of fuel evaporated as of 9/16/16. These numbers are approximate and CPC will perform a final mass balance after product recovery activities are complete.

Diversions designed for Pond 3 include a weir and two an underflow dam (at the Pond outfall). CPC continues to monitor Pond 3. No oil sheening has been seen along the shoreline on Pond 3. Unified Command (UC) will be notified if any petroleum is observed. OSC Garrard, along with the Gulf Strike Team (GST) and CPC personnel identified additional locations along Peel Creek for potential placement of an additional underflow dam. CPC has agreed to reserve material to construct these features. CPC has estimated a 10-hour construction time for this final structure. To facilitate access, CPC completed construction of an access road along the entire length of Peel Creek.

No adverse weather impacts are expected for the next operational period.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

Kerisa Coleman is representing EPA in the Join Information Center (JIC).

The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

Two START members continue to collect split surface water samples with CPC and conduct oversight of air monitoring activities. Split samples were collected from Pond 3 and confluence of Peel Creek and Cahaba River. In additional, a third START is providing ICS support.

EPA approved the vapor suppression plan and evacuation plan; therefore excavation in the area of the damaged pipe began at 15:30 this afternoon. Local firefighters used a vapor suppressant agent during excavation activities.

Product recovery operations continue in Pond 2 at two points, southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily used drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered

product to 4 storage tanks at staging 2b. There are 2 storage tanks at staging 2a where they are recovering product from recovery point 2a.

There are currently 14 storage tanks at the main staging area. Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

There are approximately 721 response worker onsite.

The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, four mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it.

A Regional Response Team (RRT4) call was held today to update RRT4 members.

See https://helena.colonialresponse.com/ for information on related to restoration of service.

PLANNED RESPONSE ACTIVITIES

The EPA OSC has requested that START collect additional surface water samples with the Cahaba Riverkeeper. START will collect the samples during the next operational period. START and OSC Stilman will continue to monitor CPC's sampling and monitoring efforts. The following activities remain unchanged and continue during the response efforts:

- ∀ Continue to participate in UC
- ∀ Monitor removal activities
- ∀ Monitor safety air monitoring
- ∀ Participate in the Joint Information Center
- ∀ Prepare for and coordinate a transition to a removal phase
- ∀ Preform water sampling

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

To:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Fri 9/16/2016 11:33:03 PM

Subject: Re: SITREP #7

,,,,,,,,,, Thsnks

Sent from my iPhone

On Sep 16, 2016, at 7:29 PM, Moore, Tony <moore.tony@epa.gov> wrote:

Minor corrections made, good to go

Sent from my iPhone

On Sep 16, 2016, at 7:04 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Tony,

I have not read this yet, I have a spill notification I have to work. If you will read and edit I will send it out to everyone.

Thank you, Greg

Sent from my iPhone

Begin forwarded message:

From: "Eichinger, Kevin" < Eichinger. Kevin@epa.gov >

Date: September 16, 2016 at 6:48:23 PM EDT To: "Harper, Greg" < Harper.Greg@epa.gov>

Subject: SITREP #7

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to CPC was made by a state mining inspector; however no volume estimate was

provided at the time. CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons – 336,000 gallons).

The local fire department responded and established a secured zone around the spill site. Local responders detected hazardous conditions due to potentially explosive vapor concentration around the spill location. Shelby County Emergency Management responded and confirmed that no public or private drinking water sources are currently threatened by the spill.

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

CPC confirmed that the impacted transmission line is shut down. Environmental contractors for CPC are on site to conduct air monitoring and remediation activities. Delays to remediate the spill routinely occur due to elevated concentrations of volatile organic compounds (VOC), specifically benzene, and explosive vapors exceeding the lower explosive limit (LEL).

EPA consulted with the Department of Interior (DOI) and the State of Alabama to identify threatened and endangered (T&E) species in the area of the spill. To EPA's knowledge, no impacts to T&E species have been reported at this time; however, field crews have noted minimal impacts to wildlife in the spill area.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, CPC, ADEM, and Shelby County. OSC Berry will demobilize on September 17, 2016. OSC Kevin Eichinger will assume EPA's position in Unified Command. OSC Garrard, OSC Tripp and four US Coast Guard Gulf Strike Team members remain deployed to assist with field observations. OSC Stilman remains deployed to assist in the Environmental Unit. Kerisa Coleman, a Region 4 public affairs specialist, arrived September 16, 2016 to assist in the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 6

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

A 6-inch pipe was observed discharging water from Pond 3; however flow was restricted and likely due to a blockage. CPC has installed a plug in the pipe to reduce the potential of petroleum impacted water being released.

The elevated benzene and LEL continue to be the greatest limiting factor to recovery operations. CPC contractor, Center for Toxicology and Environmental Health, LLC (CTEH), remain on site providing air monitoring services. CTEH continues monitoring air quality in the work zones and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excessive benzene and LEL readings. Today's VOC exceedance levels range from 0-1,351.3 (Pond 2a compressor) parts per million (ppm). The exceedances from benzene range 0.05-3 (release site) ppm. LEL exceedance levels range from 0% - 10% (Release site).

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CPC performed an mass balance calculation and determined an estimated volume of 252,000 gallons of fuel was discharged. That number has been revised to an estimated 336,000 gallons. They estimate 200,705 gallons of fuel evaporated as of 9/16/16. These numbers are approximate and CPC will perform a final mass balance after product recovery activities are complete.

Diversions designed for Pond 3 include a weir and two underflow dams (at the Pond outfall). CPC continues to monitor Pond 3. No oil sheening has been seen along the shoreline on Pond 3. Unified Command (UC) will be notified if any petroleum is observed. OSC Garrard, along with the Gulf Strike Team (GST) and CPC personnel identified additional locations along Peel Creek for potential placement of an additional underflow dam. CPC has agreed to reserve material to construct these features. CPC has estimated a 10-hour construction time for this final structure. To facilitate access, CPC completed construction of an access road along the entire length of Peel Creek.

No adverse weather impacts are expected for the next operational period.

EPA/GST remain incorporated into Operations Section and air monitoring activities. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members

continue to observe night operations.

Kerisa Coleman is representing EPA in the Joint Information Center (JIC).

The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

Two START members continue the collection of split surface water samples with CPC and conducting oversight of air monitoring activities. Split samples were collected from Pond 3 and confluence of Peel Creek and Cahaba River. In additional, a third START is providing ICS support.

EPA approved the vapor suppression plan and evacuation plan; subsequently, excavation in the area of the damaged pipe began at 1530 this afternoon. Local firefighters used a vapor suppressant agent during excavation activities.

Product recovery operations continue in Pond 2 at two points, southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily used drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to 4 storage tanks at staging 2b. There are 2 storage tanks at staging 2a where they are recovering product from recovery point 2a.

There are currently 14 storage tanks at the main staging area. Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

There are approximately 721 response worker onsite.

The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, four mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it.

A Regional Response Team (RRT4) call was held today to update RRT4 members.

See https://helena.colonialresponse.com/ for information on related to restoration of service.

PLANNED RESPONSE ACTIVITIES

The EPA OSC has requested that START collect additional surface water samples with the Cahaba Riverkeeper. START will collect the samples during the next operational period. START and OSC Stilman will continue to monitor CPC's sampling and monitoring efforts. The following activities remain unchanged and

continue during the response efforts:

 \forall Continue to participate in UC

∀ Monitor removal activities

∀ Monitor safety air monitoring

∀ Participate in the Joint Information Center

∀ Prepare for and coordinate a transition to a removal phase

∀ Preform water sampling

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

To:

Eichinger, Kevin[Eichinger.Kevin@epa.gov]

Cc:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Sat 9/17/2016 11:17:09 PM

Subject: Re: Sitrep 8

,,,,,,,,, **Thanks**

Sent from my iPhone

On Sep 17, 2016, at 7:16 PM, Eichinger, Kevin < <u>Eichinger.Kevin@epa.gov</u>> wrote:

Here's the text. We are including a map and pict so I will get you the doc shortly:

INCIDENT SUMMARY

On September 9, 2016, at 1359 hours CDT, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" below ground pipeline to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River).

CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons - 336,000 gallons).

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area. The nearest residential neighborhood and commercial area is located two miles from the spill location.

INCIDENT MANAGEMENT AND STAFFING

OSC Chuck Berry integrated into Unified Command initially and demobilize on September 17, 2016. OSC Kevin Eichinger resumed EPA's position in Unified Command.

OSCs, the United States Coast Guard (USCG) Gulf Strike Team (GST) and the Superfund Technical Assessment and Response Team (START) are embed in the Operations Sections.

An OSC and START are embed in the Environmental Unit.

EPA Public Affairs Specialist and a Public Information Officer are also assigned to the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 5

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

Total number of response Personnel: 739

CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate – 6000 bbl to 8000 bbls

Recovery/Loss to the Environment Volumes:

Fuel/Waste Recovery	Volume Since Last SITREP	Total Volume to Date
	200 gallons	85,976 gallons
Loss to the Environment due to Evaporation	28,335 gallons	229,040 gallons
Bond in the Soil	TBD	TBD
Petroleum Contact Water		242,155 gallons

CURRENT OPERATIONS

1) Product Recovery and Removal

∀ A 6-inch pipe was observed to discharge water from Pond 3; however, flow was restricted likely due to a blockage. CPC has installed a plug in the 6-inch pipe attached to Pond 3 to help reduce the potential of petroleum impacted water being released. The water level was measured before installation and 24-hours after installation of the plug. Installation of the plug caused the water level to rise approximately 1-inch.

 \forall CPC continues to evaluate plugging the culvert between Pond 2 and Pond 3. They intend to send a camera in the area tomorrow to determine the best method to seal it.

∀ CPC completed the new soil staging area last night and moved the excavated pile (generated during the previous operational period) to the new location. EPA advised CPC to have a secondary storage area ready in the event additional soil is excavated.

∀ Elevated benzene and lower explosive limit (LEL) continues to hinder progress. Minimal excavation occurred overnight due to elevated LEL and benzene readings at the leak site. CPC has excavated an estimated 40 tons of soil. Local firefighters continued to use a vapor suppressant agent during excavation activities.

∀ Due to health and safety reasons, product recovery operations shut down while excavation occurs at the leak site. As excavation activities break or suspend due to elevated

LEL and benzene levels, product recovery operations resume in Pond 2. Product recovery occurs at two points, southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily used drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to 4 storage tanks at staging 2b. There are 2 storage tanks at staging 2a where they are recovering product from recovery point 2a. Excavation activities and elevated LEL and benzene levels limited product recover efforts today.

∀ Inclement weather caused activities to shut down for a period of time.

∀ Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

2) Environmental Sampling and Impacts

a. Air Monitoring

∀ Work interruptions continue due to excessive benzene and LEL readings. Today's VOC's peaked at 270 parts per million (ppm) at the 2a compressor; benzene peaked at 2.4 ppm at the release site; and LEL peaked at 26% at stopple 2.

∀ Two START members continue to conduct oversight of air monitoring activities.

b. Surface Water

∀ Two START members continue to collect split surface water samples with CPC. Split samples were collected from the Cahaba River in coordination with the Cahaba River Keeper and CPC's environmental consultant. START was unable to collect split samples from Pond 3 and Peel Creek due to excavation at the leak site; however, CPC's environmental consultant had a crew in the area and was able to collect samples from this area. Preliminary EPA water sample data should be received tonight.

c. Wildlife Impacts

∀ The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, five mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it. No additional impacted wildlife was reported during this operation period.

3) Health and Safety Oversite

∀ EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

∀ The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

4) Restoration of Services

∀ CPC requested a waiver of the prohibition for commingling provisions are found in 40 C.F.R. § 80.78(a)(7) that prohibits any person from combining any reformulated gasoline blendstock for oxygenate blending with any other gasoline, blendstock, or oxygenate, unless certain conditions are met. The waiver request was issued on September 16, 2016 and will expire October 6, 2016.

∀ CPC continues to stage material and prepare for pushing the pig through the pipe to remove the remaining product. This process is anticipated to begin on Sunday afternoon and will be complete Monday morning.

∀ CPC continues to implement the plan to install an approximate 1,000 foot section of pipe to by-pass the leak site. This plan was developed with the input of Pipeline and Hazardous Materials Safety Agency (PHMSA). Once installed, the pipeline can resume service.

5) Remediation Planning

 \forall Plans continue to be developed and will be reviewed by IC when ready.

∀ The City of Helena operates the closest drinking water well. It is located approximately 5 miles for the release site. City Helena Utilities is conducting well water sampling for the constituents found in gasoline.

PLANNED RESPONSE ACTIVITIES

Inclement weather is expected again during the next operation period which may affect planned activities. The following activities are planned during the next operation period:

∀ Continue to participate in UC

∀ Monitor removal activities

∀ START will continue to collect additional split surface water samples with the CPC environmental contractor and the Cahaba Riverkeeper

 \forall START will continue to monitor CPC's air monitoring efforts

 \forall Monitor safety air monitoring

∀ Participate in the Joint Information Center

- \forall Prepare for and coordinate a transition to a removal phase
- ∀ CPC will pre-stage oil containment booms on the Cahaba River
- \forall Install an additional underflow dam near the confluence of Peel Creek and the Cahaba River
- ∀ Pre-stage aeration equipment along Peel Creek.
- ∀ Complete pipeline bypass and restore service.
- ∀ Continue recovery of fuel from Pond 2
- ∀ Continue removal of fuel from the plugged pipeline

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

To:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Sat 9/17/2016 11:46:54 PM

Subject: RE: Sitrep 8

Do you want me to forward my edits or incorporate my into your's?

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Moore, Tony

Sent: Saturday, September 17, 2016 7:34 PM

To: Harper, Greg Subject: Re: Sitrep 8

Ignore that one

Sent from my iPhone

On Sep 17, 2016, at 7:17 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Thanks

Sent from my iPhone

On Sep 17, 2016, at 7:16 PM, Eichinger, Kevin < Eichinger.Kevin@epa.gov > wrote:

Here's the text. We are including a map and pict so I will get you the doc shortly:

INCIDENT SUMMARY

On September 9, 2016, at 1359 hours CDT, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" below ground pipeline to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River).

CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons – 336,000 gallons).

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area. The nearest residential neighborhood and commercial area is located two miles from the spill location.

INCIDENT MANAGEMENT AND STAFFING

OSC Chuck Berry integrated into Unified Command initially and demobilize on September 17, 2016. OSC Kevin Eichinger resumed EPA's position in Unified Command.

OSCs, the United States Coast Guard (USCG) Gulf Strike Team (GST) and the Superfund Technical Assessment and Response Team (START) are embed in the Operations Sections.

An OSC and START are embed in the Environmental Unit.

EPA Public Affairs Specialist and a Public Information Officer are also assigned to the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 5

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

Total number of response Personnel: 739

CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate - 6000 bbl to 8000 bbls

Recovery/Loss to the Environment Volumes:

Fuel/Waste Recovery Volume Since Last SITREP Total Volume to Date Recovered from Pond #2 200 gallons 85,976 gallons Loss to the Environment due 28,335 gallons 229,040 gallons

to Evaporation
Bond in the Soil
Petroleum Contact Water

TBD

TBD 242,155 gallons

CURRENT OPERATIONS

1) Product Recovery and Removal

 \forall A 6-inch pipe was observed to discharge water from Pond 3; however, flow was restricted likely due to a blockage. CPC has installed a plug in the 6-inch pipe attached to Pond 3 to help reduce the potential of petroleum impacted water being released. The water level was measured before installation and 24-hours after installation of the plug. Installation of the plug caused the water level to rise approximately 1-inch.

∀ CPC continues to evaluate plugging the culvert between Pond 2 and Pond 3. They intend to send a camera in the area tomorrow to determine the best method to seal it.

∀ CPC completed the new soil staging area last night and moved the excavated pile (generated during the previous operational period) to the new location. EPA advised CPC to have a secondary storage area ready in the event additional soil is excavated.

∀ Elevated benzene and lower explosive limit (LEL) continues to hinder progress. Minimal excavation occurred overnight due to elevated LEL and benzene readings at the leak site. CPC has excavated an estimated 40 tons of soil. Local firefighters continued to use a vapor suppressant agent during excavation activities.

∀ Due to health and safety reasons, product recovery operations shut down while excavation occurs at the leak site. As excavation activities break or suspend due to elevated LEL and benzene levels, product recovery operations resume in Pond 2. Product recovery occurs at two points, southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily used drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to 4 storage tanks at staging 2b. There are 2 storage tanks at staging 2a where they are recovering product from recovery point 2a. Excavation activities and elevated LEL and benzene levels limited product recover efforts today.

∀ Inclement weather caused activities to shut down for a period of time.

 \forall Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

2) Environmental Sampling and Impacts

a. Air Monitoring

∀ Work interruptions continue due to excessive benzene and LEL readings. Today's VOC's peaked at 270 parts per million (ppm) at the 2a compressor; benzene peaked at 2.4 ppm at the release site; and LEL peaked at 26% at stopple 2.

 \forall Two START members continue to conduct oversight of air monitoring activities.

b. Surface Water

∀ Two START members continue to collect split surface water samples with CPC. Split samples were collected from the Cahaba River in coordination with the Cahaba River Keeper and CPC's environmental consultant. START was unable to collect split samples from Pond 3 and Peel Creek due to excavation at the leak site; however, CPC's environmental consultant had a crew in the area and was able to collect samples from this area. Preliminary EPA water sample data should be received tonight.

c. Wildlife Impacts

∀ The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, five mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it. No additional impacted wildlife was reported during this operation period.

3) Health and Safety Oversite

∀ EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

∀ The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

4) Restoration of Services

∀ CPC requested a waiver of the prohibition for commingling provisions are found in 40 C.F.R. § 80.78(a)(7) that prohibits any person from combining any reformulated gasoline blendstock for oxygenate blending with any other gasoline, blendstock, or oxygenate, unless certain conditions are met. The waiver request was issued on September 16, 2016 and will expire October 6, 2016.

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∀ CPC continues to implement the plan to install an approximate 1,000 foot section of pipe to by-pass the leak site. This plan was developed with the input of Pipeline and Hazardous Materials Safety Agency (PHMSA). Once installed, the pipeline can resume service.

5) Remediation Planning

 \forall Plans continue to be developed and will be reviewed by IC when ready.

 \forall The City of Helena operates the closest drinking water well. It is located approximately 5 miles for the release site. City Helena Utilities is conducting well water sampling for the constituents found in gasoline.

PLANNED RESPONSE ACTIVITIES

Inclement weather is expected again during the next operation period which may affect planned activities. The following activities are planned during the next operation period:

∀ Continue to participate in UC

∀ Monitor removal activities

∀ START will continue to collect additional split surface water samples with the CPC environmental contractor and the Cahaba Riverkeeper

∀ START will continue to monitor CPC's air monitoring efforts

∀ Monitor safety air monitoring

∀ Participate in the Joint Information Center

 \forall Prepare for and coordinate a transition to a removal phase

 \forall CPC will pre-stage oil containment booms on the Cahaba River

 \forall Install an additional underflow dam near the confluence of Peel Creek and the Cahaba River

∀ Pre-stage aeration equipment along Peel Creek.

∀ Complete pipeline bypass and restore service.

∀ Continue recovery of fuel from Pond 2

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

To:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Sat 9/17/2016 11:55:46 PM

Subject: RE: Sitrep 8

You are welcome

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Moore, Tony

Sent: Saturday, September 17, 2016 7:50 PM

To: Harper, Greg Subject: Re: Sitrep 8

Incorporate yours into mine. Thanks and good job

Sent from my iPhone

On Sep 17, 2016, at 7:46 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

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Gregory L. Harper

EPA On-Scene Coordinator

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Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area. The nearest residential neighborhood and commercial area is located two miles from the spill location.

INCIDENT MANAGEMENT AND STAFFING

OSC Chuck Berry integrated into Unified Command initially and demobilize on

September 17, 2016. OSC Kevin Eichinger resumed EPA's position in Unified Command.

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Total number of response Personnel: 739

CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate – 6000 bbl to 8000 bbls

Recovery/Loss to the Environment Volumes:

Fuel/Waste Recovery	Volume Since Last SITREP	Total Volume to Date
Recovered from Pond #2	200 gallons	85,976 gallons
Loss to the Environment due		229,040 gallons
to Evaporation	,	, g
Bond in the Soil	TBD	TBD

Petroleum Contact Water

242,155 gallons

CURRENT OPERATIONS

1) Product Recovery and Removal

∀ A 6-inch pipe was observed to discharge water from Pond 3; however, flow was restricted likely due to a blockage. CPC has installed a plug in the 6-inch pipe attached to Pond 3 to help reduce the potential of petroleum impacted water being released. The water level was measured before installation and 24-hours after installation of the plug. Installation of the plug caused the water level to rise approximately 1-inch.

∀ CPC continues to evaluate plugging the culvert between Pond 2 and Pond 3.

They intend to send a camera in the area tomorrow to determine the best method to seal it.

∀ CPC completed the new soil staging area last night and moved the excavated pile (generated during the previous operational period) to the new location. EPA advised CPC to have a secondary storage area ready in the event additional soil is excavated.

∀ Elevated benzene and lower explosive limit (LEL) continues to hinder progress. Minimal excavation occurred overnight due to elevated LEL and benzene readings at the leak site. CPC has excavated an estimated 40 tons of soil. Local firefighters continued to use a vapor suppressant agent during excavation activities.

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∀ Inclement weather caused activities to shut down for a period of time.

∀ Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

2) Environmental Sampling and Impacts

a. Air Monitoring

∀ Work interruptions continue due to excessive benzene and LEL readings. Today's VOC's peaked at 270 parts per million (ppm) at the 2a compressor; benzene peaked at 2.4 ppm at the release site; and LEL peaked at 26% at stopple 2.

∀ Two START members continue to conduct oversight of air monitoring activities.

b. Surface Water

∀ Two START members continue to collect split surface water samples with

CPC. Split samples were collected from the Cahaba River in coordination with the Cahaba River Keeper and CPC's environmental consultant. START was unable to collect split samples from Pond 3 and Peel Creek due to excavation at the leak site; however, CPC's environmental consultant had a crew in the area and was able to collect samples from this area. Preliminary EPA water sample data should be received tonight.

c. Wildlife Impacts

∀ The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, five mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it. No additional impacted wildlife was reported during this operation period.

3) Health and Safety Oversite

∀ EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

∀ The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

4) Restoration of Services

∀ CPC requested a waiver of the prohibition for commingling provisions are found in 40 C.F.R. § 80.78(a)(7) that prohibits any person from combining any reformulated gasoline blendstock for oxygenate blending with any other gasoline, blendstock, or oxygenate, unless certain conditions are met. The waiver request was issued on September 16, 2016 and will expire October 6, 2016.

∀ CPC continues to stage material and prepare for pushing the pig through the pipe to remove the remaining product. This process is anticipated to begin on Sunday afternoon and will be complete Monday morning.

∀ CPC continues to implement the plan to install an approximate 1,000 foot section of pipe to by-pass the leak site. This plan was developed with the input of Pipeline and Hazardous Materials Safety Agency (PHMSA). Once installed, the pipeline can resume service.

5) Remediation Planning

∀ Plans continue to be developed and will be reviewed by IC when ready.

∀ The City of Helena operates the closest drinking water well. It is located approximately 5 miles for the release site. City Helena Utilities is conducting well water sampling for the constituents found in gasoline.

PLANNED RESPONSE ACTIVITIES

Inclement weather is expected again during the next operation period which may affect planned activities. The following activities are planned during the next operation period:

- ∀ Continue to participate in UC
- ∀ Monitor removal activities
- \forall START will continue to collect additional split surface water samples with the CPC environmental contractor and the Cahaba Riverkeeper
- ∀ START will continue to monitor CPC's air monitoring efforts
- ∀ Monitor safety air monitoring
- ∀ Participate in the Joint Information Center
- \forall Prepare for and coordinate a transition to a removal phase
- ∀ CPC will pre-stage oil containment booms on the Cahaba River
- \forall Install an additional underflow dam near the confluence of Peel Creek and the Cahaba River
- ∀ Pre-stage aeration equipment along Peel Creek.
- ∀ Complete pipeline bypass and restore service.
- \forall Continue recovery of fuel from Pond 2
- ∀ Continue removal of fuel from the plugged pipeline

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

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Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | <u>epaosc.org</u>

To:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Mon 9/19/2016 12:01:28 AM

Subject: RE: SITREP 9

thanks

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Moore, Tony

Sent: Sunday, September 18, 2016 8:01 PM

To: Harper, Greg

Subject: Re: SITREP 9

No changes

Sent from my iPhone

On Sep 18, 2016, at 7:55 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Any changes? If so I will use your text.

Sent from my iPhone

On Sep 18, 2016, at 7:50 PM, Moore, Tony < moore.tony@epa.gov > wrote:

Check it and send it on

Sent from my iPhone

On Sep 18, 2016, at 7:20 PM, Eichinger, Kevin < <u>Eichinger.Kevin@epa.gov</u>> wrote:

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #9

1800 CDT, September 18, 2016

INCIDENT SUMMARY

On September 9, 2016, at 1359 hours CDT, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" below ground pipeline to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River).

CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8,000 bbls (252,000 gallons – 336,000 gallons).

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama.

INCIDENT MANAGEMENT AND STAFFING

OSC Kevin Eichinger remains integrated into Unified Command.

OSCs, the United States Coast Guard (USCG) Gulf Strike Team (GST) and the Superfund Technical Assessment and Response Team (START) are embed in the Operations Sections.

START is embedded in the Environmental Unit.

EPA Public Affairs Specialist and a Public Information Officer are also assigned to the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

Total number of response Personnel: 743

CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate - 6,000 bbl to 8,000 bbls

Recovery/Loss to the Environment Volumes:

Fuel/Waste Recovery	Volume Since Last SITREP	Total Volume to Date
Recovered from Pond #2	To be reported*	85,976 gallons*
Loss to the Environment due		257,375 gallons
to Evaporation	-	,
Bond in the Soil	TBD	TBD
Petroleum Contact Water		242,155 gallons*
Petroleum Contaminated Soil		40 tons

Notes:

* Product recovery activities did occur this operational period. Crews were unable to provide product recovery number before the 1600 meeting.

CURRENT OPERATIONS

1) Product Recovery and Removal

∀ OSC Eichinger participated in an overflight and assessed the Cahaba River and site operations. No sheen was observed on the Cahaba.

 \forall Crews continues to evaluate plugging the culvert between Pond 2 and Pond 3. OSC Garrard oversaw and provided support as they sent a camera in the area to determine the best method to seal it; however, the camera was unable to find the culvert. Unified Command will explore other methods to look for it.

∀ OSC Garrard is working with Operations to evaluate potential options for controlling source material at leak site prior to discharging to Pond 2.

 \forall A fuel/water mixture continues to drain out of the leak site to Pond 2. As of this morning, the quantity has been reduced to approximately 1 quart per minute. The fuel to water ratio is estimated at 20%, respectively.

 \forall Visual observations indicate gasoline on Pond 2 covers approximately one third of the pond and thickness to be approximately 1-inch, where it pooled (see photo below).

∀ Operations continued to recover product from Pond 2. Product recovery occurred at two points, the southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). Skimmers capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to four storage tanks at staging 2b. There are two storage tanks at staging 2a, to contain recovered product in that area. This evening, Boom was placed across Pond 2 to keep the pooled product in the northeast portion of the pond contained in that area.

∀ Pipeline draining activities continue at stopple 2.

∀ Excavation did not occur during this reporting period.

 \forall Inclement weather caused activities to shut down for a period of time this morning.

∀ Installation of an additional underflow dam in Peel Creek, approximately 200 feet southeast of the Cahaba River is progressing. Operations anticipates completion tomorrow.

2) Environmental Sampling and Impacts

a. Air Monitoring

∀ Work interruptions continue due to excessive benzene and LEL readings. Today's VOC's peaked at 768 parts per million (ppm) at the 2a recovery; benzene peaked at 5.7 ppm at the 2a recovery; and LEL peaked at 8% at stopple 2.

∀ One START member continues to conduct oversight of air monitoring activities.

b. Surface Water

∀ One START member continues to collect split surface water samples with CPC. START obtained split samples from Pond 3, Peel Creek, and the Cahaba River in coordination with the Cahaba River Keeper and CPC's environmental consultant.

∀ An EPA OSC and START kayaked the Cahaba River from the confluence of the with Peel Creek to approximately 2 miles down streams. Water samples were collected. No sheen was observed on the River.

∀ EPA received preliminary water sample data for September 16 and 17, 2016. Laboratory analytical results reveal the presence of site specific constituents in concentrations similar to CPC's data. The surface water sample collected at the confluence of Peel Creek and the Cahaba River on September 16, 2016 contained

total petroleum hydrocarbon (TPH) gasoline range organics (GRO) at an estimated concentration of 0.064 milligrams per kilogram (mg/kg). This detection is low and may not be related to the spill. Subsequent sampling at this location did not identify site specific constituents above the laboratory reporting limit. EPA will continue to collect surface water samples in the area and monitor for any changes.

 \forall The sample collected at this location the following day did not detect any site specific constituents above the laboratory reporting limit.

c. Wildlife Impacts

∀ The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. During this operation period, teams identified one dead otter, one dead duck, and three dead turtles. Federal Fish and Wildlife visited the site to identify the duck species and determined it was a hen wood duck.

 \forall To date, seven mammals including a rabbit, two raccoons, one fox, one coyote, one otter, and one armadillo have been impacted; four reptiles (turtle) has been impacted; and two birds (a duck and one white bird) have been impacted. The white bird remains in a restricted area and teams have not been able collect it; however, it is assumed to be an egret.

3) Health and Safety Oversite

∀ EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress.

∀ Two GST members continue to observe night operations.

∀ The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

4) Restoration of Services

 \forall CPC continues to stage material and prepare for pushing the pig through the pipe to remove the remaining product. Operation is currently planned for the next operational period (tomorrow, 9/19/2016)

∀ CPC continues to implement the plan to install an approximate 1,000-foot section of pipe to by-pass the leak site. This plan was developed with the input of Pipeline and Hazardous Materials Safety Agency (PHMSA). Once installed, the pipeline can resume service.

∀ Crews continue work to excavate and level the route for the bypass line and stage pipe. CPC has reported in the media that pipeline service will be restored by September 23, 2016.

5) Remediation Planning

 \forall Plans continue to be developed and will be reviewed by UC when ready.

 \forall CPC is working to identify livestock access and potential use of the Cahaba River for crop irrigation.

6) Emergency Fuel Waiver

∀ CPC requested a waiver of the prohibition for commingling provisions [found in 40 C.F.R. § 80.78(a)(7)] that prohibits any person from combining any reformulated gasoline blendstock for oxygenate blending with any other gasoline, blendstock, or oxygenate, unless certain conditions are met. The waiver request was issued on September 16, 2016 and will expire October 6, 2016, EPA issued an emergency fuel waiver of the reformulated gasoline (RFG) requirements in Alabama, Delaware, Georgia, Kentucky, Maryland, Mississippi, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and the District of Columbia. If there is any change or addition to the waiver status it will be noted in the SITREP.

PLANNED RESPONSE ACTIVITIES

Inclement weather may impact night ops but is not expected during the next operation period. The following activities are planned during the next operation period:

- ∀ Continue to participate in UC
- ∀ Monitor removal activities
- ∀ START will continue to collect additional split surface water samples with the CPC environmental contractor and the Cahaba River Keeper. Water samples will be collected from Pond #2.
- ∀ START will continue to monitor CPC's air monitoring efforts
- ∀ Participate in the Joint Information Center
- \forall Prepare for and coordinate a transition to a removal phase
- \forall CPC will pre-stage oil containment booms on the Cahaba River

- ∀ Continue to install the additional underflow dam near the confluence of Peel Creek and the Cahaba River
- ∀ Pre-stage aeration equipment along Peel Creek.
- ∀ Complete pipeline bypass and restore service.
- ∀ Continue recovery of fuel from Pond 2
- ∀ Continue removal of fuel from the plugged pipeline
- ∀ The FAA will be contacted to extend the no-fly over the site

SITUATIONAL REFERENCE MATERIAL

Aerial photographic taken today. Pond #3 is on the left; Pond #2 is on the right. Fuel has been confined to the upper 1/3 of the pond.

Overview of EPA Surface Water Sampling Locations

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

To: Harper, Greg[Harper.Greg@epa.gov]; Moore, Tony[moore.tony@epa.gov]

From: Eichinger, Kevin

Sent: Sat 9/17/2016 11:16:23 PM

Subject: Sitrep 8

....... ,,,,,,,,,,

Here's the text. We are including a map and pict so I will get you the doc shortly:

INCIDENT SUMMARY

On September 9, 2016, at 1359 hours CDT, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" below ground pipeline to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River).

CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons - 336,000 gallons).

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area. The nearest residential neighborhood and commercial area is located two miles from the spill location.

INCIDENT MANAGEMENT AND STAFFING

OSC Chuck Berry integrated into Unified Command initially and demobilize on September 17, 2016. OSC Kevin Eichinger resumed EPA's position in Unified Command.

OSCs, the United States Coast Guard (USCG) Gulf Strike Team (GST) and the Superfund Technical Assessment and Response Team (START) are embed in the Operations Sections.

An OSC and START are embed in the Environmental Unit.

EPA Public Affairs Specialist and a Public Information Officer are also assigned to the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 5

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

Total number of response Personnel: 739

CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate - 6000 bbl to 8000 bbls

Recovery/Loss to the Environment Volumes:

Fuel/Waste Recovery	Volume Since Last SITREP	Total Volume to Date
	200 gallons	85,976 gallons
Loss to the Environment due		229,040 gallons
to Evaporation		
Bond in the Soil	TBD	TBD
Petroleum Contact Water		242,155 gallons

CURRENT OPERATIONS

1) Product Recovery and Removal

∀ A 6-inch pipe was observed to discharge water from Pond 3; however, flow was restricted likely due to a blockage. CPC has installed a plug in the 6-inch pipe attached to Pond 3 to help reduce the potential of petroleum impacted water being released. The water level was measured before installation and 24-hours after installation of the plug. Installation of the plug caused the water level to rise approximately 1-inch.

 \forall CPC continues to evaluate plugging the culvert between Pond 2 and Pond 3. They intend to send a camera in the area tomorrow to determine the best method to seal it.

∀ CPC completed the new soil staging area last night and moved the excavated pile (generated during the previous operational period) to the new location. EPA advised CPC to have a secondary storage area ready in the event additional soil is excavated.

∀ Elevated benzene and lower explosive limit (LEL) continues to hinder progress. Minimal excavation occurred overnight due to elevated LEL and benzene readings at the leak site. CPC has excavated an estimated 40 tons of soil. Local firefighters continued to use a vapor suppressant agent during excavation activities.

∀ Due to health and safety reasons, product recovery operations shut down while excavation occurs at the leak site. As excavation activities break or suspend due to elevated LEL and benzene levels, product recovery operations resume in Pond 2. Product recovery occurs at two points, southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily used drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to 4 storage tanks at staging 2b. There are 2 storage tanks at staging 2a where they are recovering product from recovery point 2a. Excavation activities and elevated LEL and benzene levels limited product recover efforts today.

∀ Inclement weather caused activities to shut down for a period of time.

∀ Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

2) Environmental Sampling and Impacts

a. Air Monitoring

∀ Work interruptions continue due to excessive benzene and LEL readings. Today's VOC's peaked at 270 parts per million (ppm) at the 2a compressor; benzene peaked at 2.4 ppm at the release site; and LEL peaked at 26% at stopple 2.

∀ Two START members continue to conduct oversight of air monitoring activities.

b. Surface Water

∀ Two START members continue to collect split surface water samples with CPC. Split samples were collected from the Cahaba River in coordination with the Cahaba River Keeper and CPC's environmental consultant. START was unable to collect split samples from Pond 3 and Peel Creek due to excavation at the leak site; however, CPC's environmental consultant had a crew in the area and was able to collect samples from this area. Preliminary EPA water sample data should be received tonight.

c. Wildlife Impacts

∀ The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, five mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it. No additional impacted wildlife was reported during this operation period.

3) Health and Safety Oversite

∀ EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

∀ The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

4) Restoration of Services

∀ CPC requested a waiver of the prohibition for commingling provisions are found in 40 C.F.R. § 80.78(a)(7) that prohibits any person from combining any reformulated gasoline blendstock for oxygenate blending with any other gasoline, blendstock, or oxygenate, unless certain conditions are met. The waiver request was issued on September 16, 2016 and will expire October 6, 2016.

∀ CPC continues to stage material and prepare for pushing the pig through the pipe to remove the remaining product. This process is anticipated to begin on Sunday afternoon and will be complete Monday morning.

∀ CPC continues to implement the plan to install an approximate 1,000 foot section of pipe to bypass the leak site. This plan was developed with the input of Pipeline and Hazardous Materials Safety Agency (PHMSA). Once installed, the pipeline can resume service.

5) Remediation Planning

 \forall Plans continue to be developed and will be reviewed by IC when ready.

∀ The City of Helena operates the closest drinking water well. It is located approximately 5 miles for the release site. City Helena Utilities is conducting well water sampling for the constituents found in gasoline.

PLANNED RESPONSE ACTIVITIES

Inclement weather is expected again during the next operation period which may affect planned activities. The following activities are planned during the next operation period:

- ∀ Continue to participate in UC
- ∀ Monitor removal activities
- ∀ START will continue to collect additional split surface water samples with the CPC environmental contractor and the Cahaba Riverkeeper
- ∀ START will continue to monitor CPC's air monitoring efforts
- \forall Monitor safety air monitoring
- ∀ Participate in the Joint Information Center
- ∀ Prepare for and coordinate a transition to a removal phase
- ∀ CPC will pre-stage oil containment booms on the Cahaba River
- ∀ Install an additional underflow dam near the confluence of Peel Creek and the Cahaba River
- ∀ Pre-stage aeration equipment along Peel Creek.
- \forall Complete pipeline bypass and restore service.
- \forall Continue recovery of fuel from Pond 2

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

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office: 404-562-8268 | cell: 678-897-3759 | <u>epaosc.org</u>

To:

Webster, James[Webster.James@epa.gov]

Cc:

Berry, Chuck[Berry.Chuck@epa.gov]; Moore, Tony[moore.tony@epa.gov]

From:

Stilman, Terry

Sent:

Fri 9/16/2016 5:30:54 PM

Subject: FW: Waiver of Certain Reformulated Gasoline Regulations

Jim.

As we discussed

Terry.

From: Coleman, Shannon P. [mailto:spcoleman@colpipe.com]

Sent: Friday, September 16, 2016 1:24 PM

To: Stilman, Terry

Cc: Lohoff, Drew; Harris, Erin; Seagraves, Preston T

Subject: Waiver of Certain Reformulated Gasoline Regulations

Terry,

Colonial is requesting a waiver of 40 CFR § 80.78(a)(7), which will allow us to comingle RBOB and CBOB prior to the addition of ethanol. As well as a waiver pursuant to CAA § 211(c)(4)(C)(ii)(I), 42 U.S.C. § 7545(c)(4)(C)(ii)(I) to allow conventional gasoline to be sold in Designated RFG Covered Areas. This waiver would need to encompass RBOB and CBOB moved on Colonial Pipeline and Plantation Pipeline. Colonial anticipates needing this waiver for two to four weeks.

I believe my colleague in quality assurance has also reached out to a contact at EPA (Jeff Herzog), so we may be coming at this from both directions. Our apologizes.

My contact information is shown below. Please feel free to call or e-mail with any additional questions or concerns.

Regards,

Shannon

Shannon P. Coleman

Colonial Pipeline Company

1185 Sanctuary Pkway, Suite 100

Alpharetta, GA 30009

Direct: 678-762-2523

Mobile:

(6)(6)

To:

Kemker, Carol[Kemker.Carol@epa.gov]; Fite, Mark[Fite.Mark@epa.gov]

Cc:

Hill, Franklin[Hill.Franklin@epa.gov]; Moore, Tony[moore.tony@epa.gov]; Chaffins,

Randall[Chaffins.Randall@epa.gov]

From:

Webster, James

Sent:

Wed 9/14/2016 12:50:18 AM

Subject: FW: SITREP #4 - Pelham Pipeline Release Pelham Pipeline Spill SITREP 4 09132016 (02).pdf

Carol,

This is a big spill – close to 250,000 gallons based on current estimates. Actually, the pipeline is still leaking fuel, though at a slower rate. Tony can reach out to the OSC for an estimate of repair time, but we are still in an ER mode out there.

jim

From: Harper, Greg

Sent: Tuesday, September 13, 2016 8:30 PM **To:** Harper, Greg < Harper. Greg@epa.gov>

Subject: RE: SITREP #4 - Pelham Pipeline Release



NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #4

1800 CDT, September 13, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by the property owner, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has been updated to 235,000 gallons – See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area, and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Threatened and endangered (T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Williamson, and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center.

OSC Garrard was mobilized to the site to overlap with OSC Williamson tomorrow, he will assume responsibilities for Operations. OSC Tripp mobilized to the site to serve as the EPA Situation Unit Leader.

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

The pipeline continues to drain into Pond 2 at a rate of approximately 3 gallons per minute. Colonial has installed both stopples, one currently set and the other is tapping through the pipeline emplacing the plug. The fuel will be vacuumed from the line and into trucks for shipment to the Colonial Pelham terminal.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remains on site providing air monitoring services. They continue monitoring the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excess benzene and LEL readings. Today's highest VOC level peaked at 489 parts per million (ppm). The highest benzene level recorded was 4.8 ppm. LEL levels remain in the 100% range.

Colonial continues to increase its footprint at the site, building new roads to ease traffic congestion and allow for larger vehicles to access closer locations. A vapor recovery scrubber has been mobilized to the site to aid with vapor emissions. A decontamination pad for trucks has been constructed to decontaminate fuel-contaminated equipment.

Colonial has managed to remove approximately 107,304 gallons of liquid from Pond 2. Of that volume 18,928 gallons of fuel has been recovered and 88,376 gallons of mixed oil/water remain.

Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 115,700 gallons of fuel evaporated. 101,291 gallons of fuel is estimated to remain in the pond. These numbers are approximate and will likely change significantly over time.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the pond outfall. Colonial continues to monitor the Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. Significant rainfall may be received on site depending on the actions of a new tropical storm system forming in the Gulf of Mexico.

EPA/GST remains incorporated into Operations and air monitoring. OSC Williamson and two GST members continue on site safety and progress monitoring. Two GST members continue to observe night operations. OSC Williamson briefly met with the Vice President of Colonial during a VIP visit to the work site.

PLANNED RESPONSE ACTIVITIES

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Continue to participate in UC
Monitor removal activities
Monitor safety air monitoring
Prepare for and coordinate a transition to a removal phase.

To:

Webster, James[Webster.James@epa.gov]

Cc:

Fite, Mark[Fite.Mark@epa.gov]; Hill, Franklin[Hill.Franklin@epa.gov]; Moore,

Tony[moore.tony@epa.gov]; Chaffins, Randall[Chaffins.Randall@epa.gov]

Kemker, Carol

Wed 9/14/2016 1:45:32 AM

Subject: Re: SiTREP #4 - Pelham Pipeline Release

Thanks for the update.

Sent from my iPhone

On Sep 13, 2016, at 8:50 PM, Webster, James < Webster. James@epa.gov > wrote:

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Subject: RE: SITREP #4 - Pelham Pipeline Release

<image003.jpg>

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• □ □ □ □ □ □ □ ■ Monitor removal activities
•□□□□□□□ Monitor safety air monitoring
• Prepare for and coordinate a transition to a removal phase.

<Pelham_Pipeline_Spill_SITREP_4_09132016 (02).pdf>

To:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Thur 9/15/2016 12:37:26 AM

Subject: Re: SITREP #5 - Pelham Pipeline Spill

Thanks

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

Sent from my iPhone

On Sep 14, 2016, at 8:37 PM, Moore, Tony <moore.tony@epa.gov> wrote:

Can you cut and paste this in the email

Sent from my iPhone

On Sep 14, 2016, at 8:25 PM, Harper, Greg < Harper. Greg@epa.gov > wrote:

Tony,

Please find the attached SITREP #5 from the Pelham Pipeline Spill.

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

<Pelham_Pipeline_Spill_SITREP_5_09142016.docx>

To:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Thur 9/15/2016 12:38:54 AM

Subject: RE: SITREP #5 - Pelham Pipeline Spill

Tony can you resend the document?

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Moore, Tony

Sent: Wednesday, September 14, 2016 8:37 PM To: Harper, Greg < Harper. Greg@epa.gov> Subject: Re: SITREP #5 - Pelham Pipeline Spill

Can you cut and paste this in the email

Sent from my iPhone

On Sep 14, 2016, at 8:25 PM, Harper, Greg < Harper. Greg@epa.gov > wrote:

Tony,

Please find the attached SITREP #5 from the Pelham Pipeline Spill.

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

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harper.greg@epa.gov

<Pelham_Pipeline_Spill_SITREP_5_09142016.docx>

To:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Thur 9/15/2016 12:46:05 AM

Subject: RE: SITREP #5 - Pelham Pipeline Spill

Got it thanks

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Moore, Tony

Sent: Wednesday, September 14, 2016 8:45 PM To: Harper, Greg < Harper. Greg@epa.gov> Subject: Fwd: SITREP #5 - Pelham Pipeline Spill

Sent from my iPhone

Begin forwarded message:

From: "Harper, Greg" < Harper. Greg@epa.gov> Date: September 14, 2016 at 8:25:09 PM EDT To: "Moore, Tony" < moore.tony@epa.gov>

Cc: "Berry, Chuck" < Berry.Chuck@epa.gov >, "Tripp, Christopher"

< tripp.christopher@epa.gov>

Subject: SITREP #5 - Pelham Pipeline Spill

Tony,

Please find the attached SITREP #5 from the Pelham Pipeline Spill.

Greg

Gregory L. Harper

EPA On-Scene Coordinator

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harper.greg@epa.gov

To: william.deas@HQ.DHS.GOV[william.deas@HQ.DHS.GOV];

michael.k.sams@uscg.mil[michael.k.sams@uscg.mil]

Cc: Webster, James[Webster.James@epa.gov]; Moore, Tony[moore.tony@epa.gov], Andrew,

Gary[Andrew.Gary@epa.gov]

From: Harper, Greg

Sent: Thur 9/15/2016 12:47:34 PM

Subject: FW: SITREP #5 - Pelham Pipeline Spill
Pelham Pipeline Spill SITREP 5 09142016.pdf
Pelham Pipeline Spill SITREP 1 final 09102016.pdf
Pelham Pipeline Spill SITREP 2 final 09112016.pdf
Pelham Pipeline Spill SITREP 3 09122016.pdf
Pelham Pipeline Spill SITREP 4 09132016 (02).pdf

Mr. Deas and Mr. Sams,

It has been requested to send you all the past SITREPs for the Pelham Pipeline Spill and include you in all the future SITREPs. If you have any questions please let me know.

Thank you,

Greg

Gregory L. Harper

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Atlanta, Georgia 30303

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From: Harper, Greg

Sent: Wednesday, September 14, 2016 8:51 PM Cc: Harper, Greg < Harper.Greg@epa.gov > Subject: SITREP #5 - Pelham Pipeline Spill



NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #5

1800 CDT, September 14, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by the property owner, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has been updated to 235,000 gallons – See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources

threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Threatened and endangered (T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Garrard and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center (JIC).

OSC Garrard was mobilized to the site to overlap with OSC Williamson today, he will assume responsibilities for Operations. OSC Tripp mobilized to the site to serve as the EPA Situation Unit Leader. OSC Williamson demobilized during this operational period.

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

Both stopples are in place. Colonial is actively vacuuming out product and pressuring the line with nitrogen to increase recovery. The pressurization of the line increase the rate of discharge at the break. LEL levels at the break are too high to recover product at the break before it discharges to the stream and then into the pond.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remains on site providing air monitoring services. They continue monitoring the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excess benzene and LEL readings. Today's highest VOC level peaked at 989 parts per million (ppm). The highest benzene level recorded was 17.5 ppm. LEL levels were reported to be in the 41% range.

Colonial has managed to remove approximately 178,217 gallons of liquid from Pond 2. Of that volume 48,125 gallons of fuel has been recovered and 130,092 gallons of mixed oil/water remain.

Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 144,035 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the pond outfall. Colonial continues to monitor the Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. No adverse weather impacts are expected from the tropical system off the coast of Georgia.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

James Pickney arrived at Incident Command Center and integrated into JIC. The JIC set up two

interviews with all members of UC, including OSC Berry. The Birmingham, AL news outlets were WBRC and AL.com. Additionally, Colonial visited 15 homes nearest to the spill site, they were able to discuss the situation with 9 households as well as handout fact sheets.

The fire chief deemed the transfer of product from the pipeline to frac tanks was to high risk, therefore operations changed to direct tanker to tanker trucks. Scrubbers were used on the vacuum trucks while the vacuum trucks pumped product from the pipeline to the transport tanker trucks to reduce the gasoline vapors. The tanker trucks are making a round trip to Colonial's Pelham Junction facility to off-load.

OSC Garrard called the Federal Aviation Administration to request an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

UC learned during today's UC meeting, Colonial contractor began collecting water sampling on Saturday when the sample results were presented during the UC briefing. 9 sampling locations have been established, two water sample collected from Pond 3 had benzene detected at 90 mg/L and 98 mg/L the other 7 were below detection limits.

PLANNED RESPONSE ACTIVITIES

Due to the ongoing response efforts and unknown timelines, the EPA OSC will make a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

Because UC learned during today's UC meeting, Colonial contractor began collecting water sampling on Saturday when the sample results were presented during the UC briefing. EPA OSC has requested two START contractors and an Environmental Unit Leader to monitor Colonial Pipeline's sampling efforts.

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•□□□□□□ Monitor removal activities
●□□□□□□ Monitor safety air monitoring
•□□□□□□□ Participate in the Joint Information Center
•□□□□□□□ Prepare for and coordinate a transition to a removal phase
●□□□□□□ Preform water sampling



NRC 1158584, Pelham Pipeline Spill, Pelham, Shelby County, Alabama

SITUATION REPORT #1 1800, September 10, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported to the National Response Center that there was a gasoline spill from a 36" subsurface transmission line. Gasoline traveled overland for approximately 500 feet to a pond that feeds into the Peel Creek which is a tributary of the Cahaba River. The exact amount of the release was unknown; however, Colonial Pipeline initially estimated that between 1000 and 2000 gallons of gasoline entered the pond (the spill volume has been updated to 100,000 gallons in the pond – See "Current Operations" for more information). The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location.

Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post has been established in Hoover, Alabama. The spill location is in a remote area, and no evacuations are necessary. The nearest residential neighborhood is located 2 miles from the spill location.

At this time, site topography is preventing the gasoline from entering Peel Creek. The pond appears to be a former borrow pit, and only overflows after substantial rain. While this makes containment much easier, it also serves to concentrate the explosive and toxic vapors. Initial response efforts are focusing on responder health and safety and installing controls to prevent downstream migration if a sufficient rain event were to occur.

Colonial Pipeline has confirmed that the impacted transmission line has be shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline. There is an increased risk of rain for Sunday and Monday September 11th and 12th.

Threatened and endangered species in the area of the spill have been identified and communicated to Unified Command.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry was deploy to the Incident Command Post and has integrated into Unified Command. A Natural Resources Trustee consult was held with the Region 4 Department of Interior Representative. OSC Englert and OSC Williamson have been deployed to assist within Unified Command as have 4 US Coast Guard Gulf Strike Team members. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center.

Current number of EPA Personnel Assigned: 3 Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 EDT daily.

CURRENT OPERATIONS		
	Site access remains the largest obstacle to remediation. Not only from the poor roads and remote location, but the inability of personnel to approach the pond due to high explosive atmosphere readings and toxic vapors. Despite the use of respiratory protection, the potential for a catastrophic fire limits response efforts.	
	Initial volume estimates were not based on information from the pipeline system: the system noted no pressure loss. The last time the property owners observed the impacted pond was 2 weeks ago, which means that a slow leak may have been present for a long period of time resulting in little to no appreciable volume loss in any instantaneous measurement.	
	The initial volume reported was based solely on visual estimates of first responders' impressions of the pond visually. Colonial made an estimated volume update on September 9th based on better information from the field. However, this was still unsupported by hard data. Response crews completed a complicated Level B entry first thing this morning to physically measure the thickness of the product on the pond. The total thickness on the pond is currently estimated to be 3.25 inches.	
	Colonial has managed to briefly operate a pump and removed an estimated 16,000 gallons of liquid from the pond. However, if the pond is estimated to conservatively be 3 feet deep, there is over a million gallons of liquid in the pond. Colonial is currently devising plans to deal with this volume on site. Temporary storage tanks have been mobilized to the site, but their capacity is currently about 250,000 gallons. Colonial has off-site storage available also, but transportation out of the remote area will complicate and delay these efforts.	
	Colonial's pumping is currently on hold as benzene levels and LEL readings have risen	
	too high around the vacuum truck to safely operate the equipment. EPA/GST is currently incorporating into Operations and air monitoring. If removal operations start back up overnight, EPA will monitor the safety and air monitoring activities.	

PLANNED RESPONSE ACTIVITIES ☐ Continue to participate in UC ☐ Monitor removal activities ☐ Monitor safety air monitoring ☐ Review and monitor the contingency booms and diversion activities in preparation for future rain events. It should be noted that, based on the best available information now (which is limited due to terrain, vapors, and thick forest) there is little expectation for overtopping of the pond due to the small amounts of rain expected, based on NWS

predictions.



NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

1800, September 11, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond (Pond 2 on the attached Figure) that feeds into Peel Creek which is a tributary of the Cahaba River. The initial report to Colonial was made by the property owner, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1000 and 2000 gallons of gasoline entered the pond (the spill volume has been updated to 100,000 gallons in the pond – See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area, and no evacuations are necessary. The nearest residential neighborhood is located 2 miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline. There is an increased risk of rain for Sunday and Monday September 11th and 12th.

Threatened and endangered species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry was deploy to the Incident Command Post and has integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Englert, OSC Williamson, and 4 US Coast Guard Gulf Strike Team members have been deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center.

Current number of EPA Personnel Assigned: 3
Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 EDT daily.

CURRENT OPERATIONS

While the pipeline pumps are shut off, the pipeline continues to drain into Pond 2 The flow rate has lessened over the last day, but visually appears to be approximately 3 gallons per minute. Colonial continues to excavate the pipe and install stopples to block the flow, but hard rock has delayed this process. Colonial currently estimates the pipe to be blocked and evacuated Tuesday. There is no update to the discharge volume.

The high level of explosive vapors is the greatest limiting factor to recovery operations. Colonial contractor CTEH is on site providing air monitoring services. They have set up an air monitoring network and are also providing roving and escort services for personnel working inside the hot zone. Lower Explosive Level (LEL) readings as high as 99% have been observed for short periods of time. Volatile Organic Compounds (VOC) levels remain high near the pond, with the highest observed level coming from a remote monitor at 2,999 parts per million (ppm). Benzene is also being monitored for, with a highest reading of 366.7 ppm. All personnel entering the hot zone are required to have flame resistant clothing and an air monitoring escort. Action levels for benzene, VOCs and explosive vapors have been set. Work is frequently stopped due to excess benzene and LEL readings, slowing recovery.

See the map below for the layout of the emergency response site

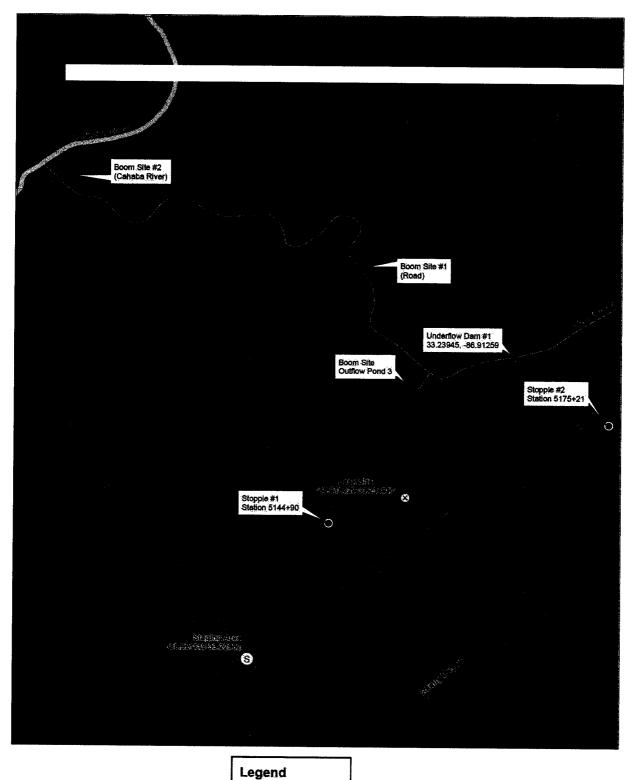
Colonial has removed 18260 gallons of liquid from Pond 2. The initial tactic of pumping directly into vacuum trucks is being transitioned to pumping into portable tanks first, with vacuum trucks hauling the material to other portable tanks at the staging area. Currently, Colonial has been unable to pump due to elevated vapor levels; no product removal has occurred for the last 30 hours. There is no exact figure for the total volume of liquid in Pond 2, but the pond is 1.2 acres in size. Conservative estimates put the total volume approximately 1,000,000 gallons of petroleum contaminated water (3 feet deep).

Sheen was reported yesterday on Pond 3. UC decided to augment the existing protection, building an underflow dam and emplacing additional boom at the outfall. Subsequent investigation of the sheen showed it was biological in nature. However, it is assumed there is some hydraulic connectivity between the two ponds. Colonial is investigating additional diversion/collection structures further along the currently-dry Peel creek bed prior to its confluence with the Cahaba.

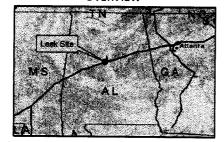
EPA/GST is incorporated into Operations and air monitoring. OSC Williamson and 2 GST members spent today on site monitoring safety and progress. EPA/GST assisted Colonial with installation and planning of the Pond 3 augmentation and will continue to coordinate those efforts. OSC Englert is assuming Deputy Incident Commander role for EPA during the overnight shift, but will maintain a field presence. Two GST members will also assist with the overnight shift.

PLANNED RESPONSE ACTIVITIES

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	Continue to participate in UC
	Monitor removal activities
	Monitor safety air monitoring
	Review and monitor the contingency booms and diversion activities in preparation for future rain events. It should be noted that, based on the best available information now (which is limited due to terrain, vapors, and thick forest) there is little expectation for overtopping of the pond due to the small amounts of rain expected, based on NWS predictions.







Colonial Pipeline

S Staging Area

Leak Site

Stopple

Boom Type

Hard Boom

Soft Boom

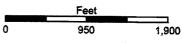
Underflow Dam

Spill Plume





Situation Status Map



9/11/2016 @ 08:50



NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #3

1800, September 12, 2016

INCIDENT DESCRIPTION

On September 9, at 1449 hours, Colonial Pipeline reported gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond (Pond 2 on the attached Figure) that feeds into Peel Creek, a tributary of the Cahaba River. The initial report to Colonial was made by the property ownerbut there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially eported to the responding OSC that between 1000 and 2000 gallons of gasoline entered the pond (the spill volume has been updated to 100,000 gallons in the pond—See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill locationShelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Postwas established in Hoover, Alabama. The spill location is in a remote area, and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the affected transmission line has been shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of voltile organic compounds (VOC) emitted for the large areas of pooled gasoline. Weather reports indicate that here is an increased risk of rain for Sunday and Monday. September 11th and 12th.

Threatened and endangered(T&E) species in the area of the spil have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry was deployed to the Incident Command Post and has integrated into Unified Command The Unified Command structure includes the EPA, Colonial, ADEM, and Shelby County EMA. OSC Williamson, and four US Coast Guard Gulf Strike Team membershave been deployed to assist within field observations A Public Information Officer (PIO) was requested and will assist in the Joint Information Center.

Due to limited overnights operations, OSC Englert demobilized today.

Current number of EPA Personnel Assigned: 2

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 EDT daily.

CURRENT OPERATIONS

Although the pipeline pumps are shut off, the pipeline continues to drain into Pond 2The flow rate has decreased over the last day, but visually appears to be approximately threegallons per minute. Colonial has installed one of the stopples and is currently installing the second. Once stopples are installed, the fuel will be vacuumed from the line and into trucks for shipment to the Colonial Pelham terminal. Evacuation of the pipeline will be followed by a nitrogen purge to remove all fuel from the line.

The high level of explosive vapors is the greatest limiting factor to recovery perations. Colonial contractor CTEH is on site providing air monitoring services. They have set up AreaRAE network and are providing roving and escort services for esponse personnel working inside the hot zone. All personnel entering the hot zone are equired to have flame resistant clothing and an air monitoring escort. Action levels for benzene, VOCs and explosive vapors have been established The work is frequently stopped due to excessive benzene and LEL readings thus slowing recovery operations. Today's highest VOC level is roughly half of yesterdays, peaking at 1,564 ppm. The highest LEL levels also dropped to 95%. Benzene levels peaked at only 8ppm thus allowing for more recovery work today.

Colonial has managed to remove approximately 40,000 gallons of liquid from Pond 2.Of that volume 5,500 gallons of oil have been separated and 34,500 gallons of mixed oil/water remainColonial established a new pumping area on the north end of the pond where vapor levels were lower. Vacum trucks continue to pump from this location. Colonial is currently planning on placing frac" tanks in a new location to the north to cut down on transitcircuit time for those trucks needing to off-load and return.

The diversions designed for Pond 3 are in place, whichinclude a substantial underflow dam at the ponds outfall. No oil sheening is visible along the shorelineat Pond 3. Colonial continues to monitor the pond and will notify UC if any petroleum is noted.

EPA/GST is incorporated into Operations and air monitoring. OSC Englert and two GST members observed site operations overnight. Colonialhas increased its Safety Personnel and air monitoring staffing levels based on input from EPA field personnel. OSC Williamson and two GST members spent the day on site monitoring safety and response progress. EPA/GST assisted Colonial withplanning and installation of the Pond 3 augmentation and will continue to coordinate those efforts. Two GST members will man the overnight shift as FOSCRs.

OSC Berry has reviewed several plans developed by the Planning Section, including Impacted Wildlife Management and Waste Managementplan. There were several revisions needed in the Waste Management Plan. Approval is expected tomorrow.

PLANNED RESPONSE ACTIVITIES

\sqcup	Continue to participate in UC
LJ	Monitor removal activities
Ц	Monitor safety air monitoring
1.1	Prepare for and coordinate a transition to a removal phase



NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #4

1800 CDT, September 13, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by the property owner, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has been updated to 235,000 gallons)—See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area, and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Threatened and endangered (T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Williamson, and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center.

OSC Garrard was mobilized to the site to overlap with OSC Williamson tomorrow, he will assume responsibilities for Operations. OSC Tripp mobilized to the site to serve as the EPA Situation Unit Leader.

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

The pipeline continues to drain into Pond 2 at a rate of approximately 3 gallons per minute. Colonial has installed both stopples, one currently set and the other is tapping through the pipeline emplacing the plug. The fuel will be vacuumed from the line and into trucks for shipment to the Colonial Pelham terminal.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remains on site providing air monitoring services. They continue monitoring the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excess benzene and LEL readings. Today's highest VOC level peaked at 489 parts per million (ppm). The highest benzene level recorded was 4.8 ppm. LEL levels remain in the 100% range.

Colonial continues to increase its footprint at the site, building new roads to ease traffic congestion and allow for larger vehicles to access closer locations. A vapor recovery scrubber has been mobilized to the site to aid with vapor emissions. A decontamination pad for trucks has been constructed to decontaminate fuel-contaminated equipment.

Colonial has managed to remove approximately 107,304 gallons of liquid from Pond 2. Of that volume 18,928 gallons of fuel has been recovered and 88,376 gallons of mixed oil/water remain.

Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 115,700 gallons of fuel evaporated. 101,291 gallons of fuel is estimated to remain in the pond. These numbers are approximate and will likely change significantly over time.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the pond outfall. Colonial continues to monitor the Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. Significant rainfall may be received on site depending on the actions of a new tropical storm system forming in the Gulf of Mexico.

EPA/GST remains incorporated into Operations and air monitoring. OSC Williamson and two GST members continue on site safety and progress monitoring. Two GST members continue to observe night operations. OSC Williamson briefly met with the Vice President of Colonial during a VIP visit to the work site.

PLANNED RESPONSE ACTIVITIES

	Continue to participate in UC
	Monitor removal activities
	Monitor safety air monitoring
П	Prepare for and coordinate a transition to a removal phase.



NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #5

1800 CDT, September 14, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek(which is a tributary of the Cahaba Rive). The initial report to Colonial was made by the property owner, but there was $\bf n$ volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has been updated t\(\omega\$35,000 gallons - See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Inciden Command Post was established in Hoover, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Threatened and endangered(T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berryremains integrated into Unified Command which includes EPA, Colonial, ADEM, and Shelby County OSC Garrard and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center(JIC).

OSC Garrard was mobilized to the site to overlap with OSC Williamson tday, he will assume responsibilities for Operations OSC Tripp mobilized to the site to serve as the EPA Situation Unit Leader. OSC Williamson demobilized during this operational period.

Current number of EPA Personnel Assigned: 4

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REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

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L	Continue to participate in UC
L	Monitor removal activities
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	Participate in the Joint Information Center
Ш	Prepare for and coordinate a transition to a removal phase
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To:

Harper, Greg[Harper.Greg@epa.gov]

Cc:

Andrew, Gary[Andrew.Gary@epa.gov]; Moore, Tony[moore.tony@epa.gov]

From:

Webster, James

Sent:

Thur 9/15/2016 12:48:44 PM

Subject: RE: SITREP #5 - Pelham Pipeline Spill

Thanks Greg.

From: Harper, Greg

Sent: Thursday, September 15, 2016 8:48 AM

To: william.deas@HQ.DHS.GOV; michael.k.sams@uscg.mil

Cc: Webster, James < Webster. James @epa.gov>; Moore, Tony < moore.tony@epa.gov>;

Andrew, Gary < Andrew. Gary@epa.gov>

Subject: FW: SITREP #5 - Pelham Pipeline Spill

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Thank you,

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response Removal and Preparedness Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Harper, Greg

Sent: Wednesday, September 14, 2016 8:51 PM Cc: Harper, Greg < Harper.Greg@epa.gov > Subject: SITREP #5 - Pelham Pipeline Spill



NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #5

1800 CDT, September 14, 2016

INCIDENT DESCRIPTION

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The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Threatened and endangered (T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

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To: Cc: Harper, Greg[Harper.Greg@epa.gov]; michael.k.sams@uscg.mil[michael.k.sams@uscg.mil]

Webster, James[Webster.James@epa.gov]; Moore, Tony[moore.tony@epa.gov]; Andrew,

Gary[Andrew.Gary@epa.gov]

From:

Deas, William

Sent:

Thur 9/15/2016 12:56:38 PM

Subject: RE: SITREP #5 - Pelham Pipeline Spill

Thank you sir! Very helpful to our needs, and appreciate your additional efforts to loop is in.

Tony Deas

William A. 'Tony' Deas Region 4 Chief Regulatory Compliance 202-510-4354

From: Harper, Greg

Sent: Thursday, September 15, 2016 8:47:34 AM

To: Deas, William; Sams, Michael K CIV

Cc: Webster, James; Moore, Tony; Andrew, Gary Subject: FW: SITREP #5 - Pelham Pipeline Spill

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Thank you,

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harper.greg@epa.gov

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To:

Moore, Tony[moore.tony@epa.gov] Weeks, Victor[weeks.victor@epa.gov]

Cc: From:

Harper, Greg

Sent:

Thur 9/15/2016 1:06:56 PM

Subject: RE: SITREP #5 - Pelham Pipeline Spill

Tony,

Do we want to include DHS on daily ERNS? I am now including Mr. Williams on the Pelham SITREPs. But if there was another large spill we would not know to include him.

Thank you,

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response Removal and Preparedness Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Weeks, Victor

Sent: Thursday, September 15, 2016 8:59 AM
To: Harper, Greg < Harper. Greg@epa.gov>
Subject: FW: SITREP #5 - Pelham Pipeline Spill

Greg:

Do you know if we can add DHS employees to the ERNS distribution list?

Victor L. Weeks

U.S. EPA Region 4

Air, Pesticides & Toxics Management Division

Chemical Emergency Preparedness & Prevention Coordinator

Atlanta Federal Center

61 Forsyth ST

Atlanta, Georgia 30024

Direct: 404-562-9189

Cell: 770-363-7715

FAX: 404-562-9163

From: Williams, James [mailto:James.Williams@HQ.DHS.GOV]

Sent: Thursday, September 15, 2016 8:47 AM To: Weeks, Victor < weeks.victor@epa.gov>

Cc: Deas, William < william.deas@HQ.DHS.GOV >; Albini, David

<David.Albini@HQ.DHS.GOV>; Whittington, Angela <Angela.Whittington@HQ.DHS.GOV>;

Gibbs, Kelly < Kelly.Gibbs@HQ.DHS.GOV > Subject: RE: SITREP #5 - Pelham Pipeline Spill

Victor,

Would it be possible for us to get on the distro of the region 4 SITREPS for events such as these?

Jim

James E. Williams

Supervisory Chemical Security Inspector



Department of Homeland Security

Office of Infrastructure Protection

Infrastructure Security Compliance Division

Field Operations Branch

Cosby, TN

Mobile 202.604.8712

CFATS Help Desk: 1-866-323-2957

Questions Regarding: CSAT@DHS.GOV

WWW.DHS.GOV/CHEMICALSECURITY

Tip Line: 877-FYI 4 DHS (877 394-4347)

November is Critical Infrastructure Security and Resilience Month

For more information about critical infrastructure, visit $\underline{\text{http://www.dhs.gov/critical-infrastructure}}$

"With honor and integrity, we will safeguard the American people, our homeland, and our values"

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From: Weeks, Victor [mailto:weeks.victor@epa.gov]
Sent: Thursday, September 15, 2016 8:28 AM

To: Garrard, Jordan Cc: Williams, James

Subject: FW: SITREP #5 - Pelham Pipeline Spill

Jordan:

James Williams with DHS was wondering if Colonial Pipeline has projected a date for when the pipeline will be returned to service?

Also, has Colonial Pipeline quantified any regional gasoline supply issues associated with this transmission pipeline incident?

Victor L. Weeks

U.S. EPA Region 4

Air, Pesticides & Toxics Management Division

Chemical Emergency Preparedness & Prevention Coordinator

Atlanta Federal Center

61 Forsyth ST

Atlanta, Georgia 30024

Direct: 404-562-9189

Cell: 770-363-7715

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Sent: Wednesday, September 14, 2016 8:51 PM

Cc: Harper, Greg < Harper.Greg@epa.gov > Subject: SITREP #5 - Pelham Pipeline Spill



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- Participate in the Joint Information Center
- Prepare for and coordinate a transition to a removal phase
- Preform water sampling

To:

miguel.l.bella@uscg.mil[miguel.l.bella@uscg.mil]

Cc:

Derek Hardy[Derek.Q.Hardy@uscg.mil];

thomas.m.mccrossen@uscg.mil[thomas.m.mccrossen@uscg.mil]; Natale,

Steven[steven.j.natale@uscg.mil] From: Masterson, Chris

Sent:

Thur 9/15/2016 2:38:03 PM

Subject: FW: (FPN E16444) SITREP #5 - Pelham Pipeline Spill

Pelham Pipeline Spill SITREP 5 09142016.pdf
Pelham Pipeline Spill SITREP 1 final 09102016.pdf
Pelham Pipeline Spill SITREP 2 final 09112016.pdf
Pelham Pipeline Spill SITREP 3 09122016.pdf
Pelham Pipeline Spill SITREP 4 09132016 (02).pdf

Gentlemen, my apologies for not sending these to you sooner. Attached are the Situation Reports from the spill down in Pelham, AL.

Christopher Masterson, Administrative Assistant

SAIC Contractor with EPA

Emergency Response, Removal and Prevention Branch (ERRPB)

61 Forsyth Street 11th FI

Atlanta, GA 30303

Office: 404-562-8706

Cell: 678-644-6538

Fax: 404-562-8701

Email: masterson.christopher@epa.gov

From: Harper, Greg

Sent: Thursday, September 15, 2016 10:28 AM

To: Masterson, Chris < Masterson. Christopher@epa.gov>

Subject: FW: SITREP #5 - Pelham Pipeline Spill

SITREPs

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response Removal and Preparedness Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Harper, Greg

Sent: Wednesday, September 14, 2016 8:51 PM

Cc: Harper, Greg < Harper.Greg@epa.gov > Subject: SITREP #5 - Pelham Pipeline Spill



NRC 1158584, Pelham Pipeline Spill

Pelham, Shelby County, Alabama

SITUATION REPORT #5

1800 CDT, September 14, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by the property owner, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has been updated to 235,000 gallons – See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Threatened and endangered (T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Garrard and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center (JIC).

OSC Garrard was mobilized to the site to overlap with OSC Williamson today, he will assume responsibilities for Operations. OSC Tripp mobilized to the site to serve as the EPA Situation Unit Leader. OSC Williamson demobilized during this operational period.

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

Both stopples are in place. Colonial is actively vacuuming out product and pressuring the line with nitrogen to increase recovery. The pressurization of the line increase the rate of discharge at the break. LEL levels at the break are too high to recover product at the break before it discharges to the stream and then into the pond.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remains on site providing air monitoring services. They continue monitoring the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excess benzene and LEL readings. Today's highest VOC level peaked at 989 parts per million (ppm). The highest benzene level recorded was 17.5 ppm. LEL levels were reported to be in the 41% range.

Colonial has managed to remove approximately 178,217 gallons of liquid from Pond 2. Of that volume 48,125 gallons of fuel has been recovered and 130,092 gallons of mixed oil/water remain.

Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 144,035 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the pond outfall. Colonial continues to monitor the Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. No adverse weather impacts are expected from the tropical system off the coast of Georgia.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

James Pickney arrived at Incident Command Center and integrated into JIC. The JIC set up two interviews with all members of UC, including OSC Berry. The Birmingham, AL news outlets were WBRC and AL.com. Additionally, Colonial visited 15 homes nearest to the spill site, they were able to discuss the situation with 9 households as well as handout fact sheets.

The fire chief deemed the transfer of product from the pipeline to frac tanks was to high risk, therefore operations changed to direct tanker to tanker trucks. Scrubbers were used on the vacuum trucks while the vacuum trucks pumped product from the pipeline to the transport tanker trucks to reduce the gasoline vapors. The tanker trucks are making a round trip to Colonial's Pelham Junction facility to off-load.

OSC Garrard called the Federal Aviation Administration to request an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

UC learned during today's UC meeting, Colonial contractor began collecting water sampling on Saturday when the sample results were presented during the UC briefing. 9 sampling locations have been established, two water sample collected from Pond 3 had benzene detected at 90 mg/L and 98 mg/L the other 7 were below detection limits.

PLANNED RESPONSE ACTIVITIES

Due to the ongoing response efforts and unknown timelines, the EPA OSC will make a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

Because UC learned during today's UC meeting, Colonial contractor began collecting water sampling on Saturday when the sample results were presented during the UC briefing. EPA OSC has requested two START contractors and an Environmental Unit Leader to monitor Colonial Pipeline's sampling efforts.
• □ □ □ □ □ Continue to participate in UC
• □ □ □ □ □ Monitor removal activities
• □ □ □ □ □ Monitor safety air monitoring
• □ □ □ □ □ □ Participate in the Joint Information Center
• □ □ □ □ □ Prepare for and coordinate a transition to a removal phase
• • • • • • • • • • • • • • • • • • •

To: Moore, Tony[moore.tony@epa.gov]

Cc: Webster, James[Webster.James@epa.gov]; Hill, Franklin@epa.gov]

From: Davis, Amber

Sent: Thur 9/15/2016 3:35:55 PM

Subject: RE: Colonial Pipeline Spill and Fuel Waiver 2016.docx

Thank you! I will send the updated draft later today.

Amber Davis, Chief | Communities Support Section | U.S. Environmental Protection Agency | Region 4 | APTMD | 61 Forsyth St. SW | Atlanta, GA 30303 | Tel 404.562.9014 | davis.amber@epa.gov

From: Moore, Tony

Sent: Thursday, September 15, 2016 11:35 AM To: Davis, Amber < Davis. Amber@epa.gov>

Cc: Webster, James < Webster.James@epa.gov >; Hill, Franklin < Hill.Franklin@epa.gov >

Subject: Colonial Pipeline Spill and Fuel Waiver 2016.docx



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

SEP 1 4 2018

THE ACMINISTRATOR

The Honorable Nathan Deal Governor of Georgia 206 Washington Street 111 State Capitol Atlanta, Georgia 30334

The Honorable Bill Haslam Governor of Tennessee State Capitol, 1st Floor 600 Charlotte Ave Nashville, Tennessee 37243

Re: Fuel Waiver Concerning Atlanta, Georgia and Nashville, Tennessee

Dear Governor Deal and Governor Haslam:

This letter is in response to your September 14, 2016 requests that the U.S. Environmental Protection Agency waive the federal gasoline low volatility requirements under the Clean Air Act (CAA) for 13 counties in metropolitan Atlanta, Georgia, and five counties in metropolitan Nashville, Tennessee, (the Affected Counties) due to a disruption in the supply of low volatility fuel caused by an unanticipated pipeline failure in Alabama on a pipeline owned by the Colonial Pipeline Company. The EPA and the U.S. Department of Energy have been actively monitoring the supply of fuel to the Affected Counties. In addition, we have been coordinating with Georgia and Tennessee state officials throughout this period. The EPA has determined, and DOE concurs, that it is necessary to take action to minimize or prevent disruption of an adequate supply of fuel to consumers in the Affected Counties. By this letter, I am granting a waiver of the 7.8 pounds per square inch (psi) Reid vapor pressure (RVP) requirement for gasoline, as provided below.

The regulations promulgated under the CAA require gasoline sold in the Affected Counties to have a maximum RVP of 7.8 psi during the "high ozone" season, which lasts through 11:59 p.m. September 15, 2016, after which state compliant gasoline may be sold and distributed in the Affected Counties under applicable regulations. See 40 C.F.R. § 80.27(a)(2)(ii) and EPA guidance at https://www.epa.gov/gasoline-standards/gasoline-reid-vapor-pressure. The unanticipated pipeline failure has resulted in a significant curtailment of the supply of 7.8 psi RVP gasoline available for distribution in the Affected Counties because the Colonial Pipeline supplies a large portion of the low volatility fuel to the Affected Counties.

¹ Georgia Counties: Cherokee, Clayton, Cobb. Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, Rockdale. Tennessee Counties: Davidson, Rutherford, Sumner, Williamson, Wilson

I have determined that an "extreme and unusual fuel supply circumstance" exists that will prevent the distribution of an adequate supply of gasoline to consumers in the Affected Counties. CAA § 211(c)(4)(C)(ii)(1), 42 U.S.C. § 7545(c)(4)(C)(ii)(1). This extreme and unusual fuel circumstance is the result of a pipeline failure, an event that could not reasonably be foreseen or prevented, and is not attributable to a lack of prudent planning on the part of suppliers of the fuel to these areas. CAA § 211(c)(4)(C)(ii)(II), 42 U.S.C. § 7545(c)(4)(C)(ii)(II). Further, I have determined that it is in the public interest to grant this waiver and that this waiver applies to the smallest geographic area necessary to address the fuel supply circumstances. CAA § 211(c)(4)(C)(ii)(III) and (iii)(I), 42 U.S.C. § 7545(c)(4)(C)(ii)(III) and (iii)(I).

Therefore, to minimize or prevent problems with the supply of gasoline, I am today issuing this waiver of the 7.8 psi RVP requirement for gasoline sold in the Affected Counties for the remainder of the "high ozone" season. This waiver is effective immediately and will continue through 11:59 p.m. September 15, 2016. Under this temporary waiver, regulated parties may sell or distribute gasoline with a maximum RVP of 9.0 psi (10.0 psi if the gasoline contains between 9 percent and 10 percent ethanol) in the Affected Counties.

The EPA will continue to work with DOE to monitor the impact of the pipeline failure on the fuel supply situation. If you have questions you may call me, or your staff may call Phillip A. Brooks at (202) 564-0652.

Sincerely,

Gina McCarthy

cc: The Honorable Dr. Ernest Moniz Secretary of Energy To:

Moore, Tony[moore.tony@epa.gov]; Webster, James[Webster.James@epa.gov]

From:

Hill, Franklin

Sent:

Fri 9/16/2016 12:49:12 AM

Subject: Fwd: EOC Spot Report: Region 4, Colonial Pipeline Spill, Pelham, AL (NRC # 1158584) -

Update #5

Sent from my iPhone

Begin forwarded message:

From: "Meiburg, Stan" < Meiburg.Stan@epa.gov> Date: September 15, 2016 at 6:46:22 PM EDT

To: "Heard, Anne" < Heard. Anne@epa.gov >, "Lapierre, Kenneth"

< Lapierre.Kenneth@epa.gov >, "Hill, Franklin" < Hill.Franklin@epa.gov >, "Kemker, Carol"

< <u>Kemker.Carol@epa.gov</u>>, "Wilkes, Mary" < <u>Wilkes.Mary@epa.gov</u>>

Subject: Fwd: EOC Spot Report: Region 4, Colonial Pipeline Spill, Pelham, AL (NRC

1158584) - Update #5

Note: this SITREP did not include, but should have, the associated request by TN for an RVP waiver.

Stan

Sent from my iPhone

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From: "Eoc, Epahq" < Eoc. Epahq@epa.gov> Date: September 15, 2016 at 11:59:56 AM CDT

To: "Eoc, Epahq" < Eoc. Epahq@epa.gov>

Subject: EOC Spot Report: Region 4, Colonial Pipeline Spill, Pelham, AL (NRC #

1158584) - Update #5

This report is being sent as a bcc to prevent accidental Reply to All messages.

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EOC Spot Report: Region 4, Colonial Pipeline Spill into Pond Near Peel Creek, Pelham, AL (NRC # 1158584) – Update #5

US Environmental Protection Agency

Report as of 1300 ET on 09/15/2016

Overview: On September 9th at 1449 ET, Colonial Pipeline reported to the National Response Center that there was a gasoline spill from a 36" subsurface transmission line. Gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek, a tributary of the Cahaba River. An estimated 6,000 barrels of gasoline (253,000 gallons) have been discharged as a result of the leak. The spill location is in a remote location so no evacuations are necessary. The nearest residential neighborhood is located two miles away.

Colonial Pipeline crews continue to prepare the affected pipeline segment for excavation and repair while cleaning up the spill. Colonial Pipeline continues to collaborate with local, state and federal agencies, including the Environmental Protection Agency, Shelby County Emergency Management Agency, Helena Fire Department, Pelham Fire Department, and others in connection with the response. As a precautionary measure, airspace above the release location has been restricted to further protect responders, personnel and the public. According to the FAA, the restriction will remain in effect until 9/18/16.

Colonial has removed approximately 178,217 gallons of liquid from Pond 2. Of that volume, 48,125 gallons of oil have been separated and 130,092 gallons of mixed oil/water remain. Colonial established a pumping area on the north end of the pond where vapor levels were lower. Vacuum trucks continue to pump from this location. Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 144,035 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The high level of explosive vapors is the greatest limiting factor to recovery operations. Colonial contractor CTEH is on site providing air monitoring services. All personnel entering the hot zone are required to have flame resistant clothing and an air monitoring escort. Action levels for benzene, VOCs and explosive vapors have been established.

The diversions designed for Pond 3 are in place, which include a substantial underflow dam at the pond's outfall. No oil sheening is visible along the shoreline at Pond 3. Colonial continues to monitor the pond and will notify Unified Command if any petroleum is observed.

State, Local and other Federal Agency Actions: The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. The Shelby County Emergency Management Association (EMA) responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State- and County-level agencies. An Incident Command post was established in Hoover, Alabama. United States Coast Guard (USCG) Gulf Strike Team (GST) members have been assisting with health and safety oversight and response operations.

EPA Actions: Four EPA Region 4 personnel and 4 USCG Strike Team Members are currently deployed to assist with the response and are integrated into Unified Command. EPA and USCG GST members are incorporated into air monitoring efforts. A Community Involvement Coordinator (CIC) is assisting at the Joint Information Center (JIC). The JIC set up two interviews with all members of UC. The Birmingham, AL news outlets were WBRC and <u>AL.com</u>. At this time, a Regional Response Team 4

(RRT4) activation is not planned. A Natural Resources Trustee consultation was held with a Region 4 Department of Interior representative. Threatened and endangered species in the area of the spill have been identified but are not impacted. Due to the ongoing response efforts, the EPA OSC will make a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

Media Interest: Low (local)

http://www.al.com/news/index.ssf/2016/09/pipeline leak spilled an estim.html

The HQ EOC will continue to monitor and provide updates as needed.

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Eugene Lee, Senior Watch Officer

U.S. Environmental Protection Agency

Headquarters Emergency Operations Center

1200 Pennsylvania Ave

Washington, DC 20004

202-564-3850

mailto:eoc.epahq@epa.gov

To:

Moore, Tony[moore.tony@epa.gov]

From:

Hill, Franklin

Sent:

Fri 9/16/2016 12:57:39 AM

Subject: Re: EOC Spot Report: Region 4, Colonial Pipeline Spill, Pelham, AL (NRC # 1158584) –

Update #5

Coordinate with APTMD

Sent from my iPhone

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<image001.png>

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Eugene Lee, Senior Watch Officer

U.S. Environmental Protection Agency

Headquarters Emergency Operations Center

1200 Pennsylvania Ave

Washington, DC 20004

202-564-3850

mailto:eoc.epahq@epa.gov

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Cc:

Hill, Franklin[Hill.Franklin@epa.gov]; Kemker, Carol[Kemker.Carol@epa.gov]; Davis,

Anita[Davis.Anita@epa.gov]; Gettle, Jeaneanne[Gettle.Jeaneanne@epa.gov]

From: Webster, James Sent:

Fri 9/16/2016 12:59:35 AM

Subject: Re: EOC Spot Report: Region 4, Colonial Pipeline Spill, Pelham, AL (NRC # 1158584) -

Update #5

It's ok tony.

Carol.

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Anita[Davis.Anita@epa.gov]; Gettle, Jeaneanne[Gettle.Jeaneanne@epa.gov]

From:

Kemker, Carol

Sent:

Fri 9/16/2016 1:19:47 AM

Subject: Re: EOC Spot Report: Region 4, Colonial Pipeline Spill, Pelham, AL (NRC # 1158584) -

Update #5

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To: "Heard, Anne" < Heard. Anne@epa.gov >, "Lapierre, Kenneth"

< Lapierre.Kenneth@epa.gov>, "Hill, Franklin" < Hill.Franklin@epa.gov>,

"Kemker, Carol" < Kemker.Carol@epa.gov>, "Wilkes, Mary"

< Wilkes. Mary@epa.gov>

Subject: Fwd: EOC Spot Report: Region 4, Colonial Pipeline Spill,

Pelham, AL (NRC # 1158584) – Update #5

Note: this SITREP did not include, but should have, the associated request by TN for an RVP waiver.

Stan

Sent from my iPhone

Begin forwarded message:

From: "Eoc, Epahq" < Eoc. Epahq@epa.gov > Date: September 15, 2016 at 11:59:56 AM CDT

To: "Eoc, Epahq" < Eoc. Epahq@epa.gov >

Subject: EOC Spot Report: Region 4, Colonial Pipeline Spill,

Pelham, AL (NRC # 1158584) - Update #5

This report is being sent as a bcc to prevent accidental Reply to All messages.

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<image001.png>

EOC Spot Report: Region 4, Colonial Pipeline Spill into Pond Near Peel Creek, Pelham, AL (NRC # 1158584) – Update #5

US Environmental Protection Agency

Report as of 1300 ET on 09/15/2016

Overview: On September 9th at 1449 ET, Colonial Pipeline reported to the National Response Center that there was a gasoline spill from a 36" subsurface transmission line. Gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek, a tributary of the Cahaba River. An estimated 6,000 barrels of gasoline (253,000 gallons) have been discharged as a result of the leak. The spill location is in a remote location so no evacuations are necessary. The nearest residential neighborhood is located two miles away.

Colonial Pipeline crews continue to prepare the affected pipeline segment for excavation and repair while cleaning up the spill. Colonial Pipeline continues to collaborate with local, state and federal agencies, including the Environmental Protection Agency, Shelby County Emergency Management Agency, Helena Fire Department, Pelham Fire Department, and others in connection with the response. As a precautionary measure, airspace above the release location has been restricted to further protect responders, personnel and the public. According to the FAA, the restriction will remain in effect until 9/18/16.

Colonial has removed approximately 178,217 gallons of liquid from Pond 2. Of that volume, 48,125 gallons of oil have been separated and 130,092 gallons of mixed oil/water remain. Colonial established a pumping area on the north end of the pond where vapor levels were lower. Vacuum trucks continue to pump from this location. Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 144,035 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The high level of explosive vapors is the greatest limiting factor to recovery operations. Colonial contractor CTEH is on site providing air monitoring services. All personnel entering the hot zone are required to have flame resistant clothing and an air monitoring escort. Action levels for benzene, VOCs and explosive vapors have been established.

The diversions designed for Pond 3 are in place, which include a substantial underflow dam at the pond's outfall. No oil sheening is visible along the shoreline at Pond 3. Colonial continues to monitor the pond and will notify Unified Command if any petroleum is observed.

State, Local and other Federal Agency Actions: The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. The Shelby County Emergency Management Association (EMA) responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State- and County-level agencies. An Incident Command post was established in Hoover, Alabama. United States Coast Guard (USCG) Gulf Strike Team (GST) members have been assisting with health and safety oversight and response operations.

EPA Actions: Four EPA Region 4 personnel and 4 USCG Strike Team Members are currently deployed to assist with the response and are integrated into Unified Command. EPA and USCG GST members are incorporated into air monitoring efforts. A Community Involvement Coordinator (CIC) is assisting at the Joint Information Center (JIC). The JIC set up two interviews with all members of UC. The Birmingham, AL news outlets were WBRC and AL.com. At this time, a Regional Response Team 4 (RRT4) activation is not planned. A Natural Resources Trustee consultation was held with a Region 4 Department of Interior representative. Threatened and endangered species in the area of the spill have been identified but are not impacted. Due to the ongoing response efforts, the EPA OSC will make a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

Media Interest: Low (local)

http://www.al.com/news/index.ssf/2016/09/pipeline leak spilled an estim.html

The HQ EOC will continue to monitor and provide updates as needed.

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Eugene Lee, Senior Watch Officer

U.S. Environmental Protection Agency

Headquarters Emergency Operations Center

1200 Pennsylvania Ave

Washington, DC 20004

202-564-3850

mailto:eoc.epahq@epa.gov

To: Stilman, Terry[Stilman.Terry@epa.gov]; Harper, Greg[Harper.Greg@epa.gov]; Moore,

Tony[moore.tony@epa.gov]

Cc: Thoms, Sharon[Thoms.Sharon@epa.gov]; Thomas, Brett[Thomas.Brett@epa.gov]; Frederick,

Tim[Frederick.Tim@epa.gov]; Collins, Arthur[Collins.Arthur@epa.gov]

From: Adams, Glenn

Sent: Fri 9/16/2016 7:19:52 PM

Subject: FW: Colonial Pipeline Spill Tables of ecological screening values

Tables 1 - Ecological Surface Water Screening Tables 9 19 16 xlsx

Table 2 Ecological Sediment Screening Table 9 16 16.xlsx

Summary May 2016.xls

Terry,

Here is a list of the contaminants that we think would be important to look for in surface water and/or sediments. They are included in these eco (surface water and sediment) screening level table. We don't have eco values for all of these, but my folks are trying to fill in the missing parts. I have also attached the latest version of the RSL table. Eco risk will probably be your "driver" but you can look at the "Tap Water" or soil values in the RSL table for a guide to help you determine potential detection limits. If you collect any data and it exceeds these screening levels, then we can help you look at appropriate action levels for what you are finding (e.g., specifically for fish or swimmers, etc)

As I told you on the phone, I'm in Denver from Sunday thru Friday and won't be of much help to you, but feel free to call if needed. Tim Frederick will be acting for me while I'm out of the office. Below is the contact information for Tim, Brett and Sharon.

I hope this is helpful, but let us know if you have any questions or issues.

Thanks,

Glenn

Tim Frederick, HH Risk 2-8598 (desk) 470-728-7420 (cell)

Brett Thomas, Eco Risk 2-8751 (desk) 404-326-2715 (cell)

Sharon Thoms, Eco Risk 2-8666 (desk) 404-414-3550 (cell)

Glenn Adams, Chief

Scientific Support Section

EPA Region 4 Superfund Division

404-562-8771 (office)

From: Thoms, Sharon

Sent: Friday, September 16, 2016 2:41 PM
To: Adams, Glenn < Adams. Glenn@epa.gov>

Subject: Colonial Pipeline Spill Tables of ecological screening values

Glenn,

I put the names of the chemicals that are recommended for analysis in the tables, but I have not finished filling out the screening values.

Sharon

Sharon Thoms

Life Scientist

Resources & Scientific Integrity Branch

Superfund Division

U.S. EPA Region 4

Atlanta, GA 30303

(404) 562-8666

Toxicity and Cher	nical-specific information	ancer, " = where: n SL < 100X c SL; " = where n SL < 10X c SL; SSL values are base. Contaminant		Screening Levels Protection of G	round Water
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E+00 H 10E03	P v	1.7E+0	Crotonaldehyde, trans-	1319-77-3 123-73-9	8.3E+00 n 8.2E+04 3.7E+00 n 1.7E+00	\$36+02 n 266+05	N 125-00 H	
E-01 C 4.3E-05 C	LAGEDITY	2.75+0	Currence	98-82-8		435-00 - 155-00	· 经报 •)	
E-01 H 20640		0.1	Cyanazine	135-20-6 21725-46-2	1月6-03 for 8月6-03 2月6-03 在 1月6-03 8月6-01 在 276-00	455-02 6 (36-01	* 324 ×	
1,08.03			Cyanides -Calcium Cyanide		190		8EG .	
5.00.00	1		-Copper Cyanide	592-01-8 544-92-3	7.86-01 1 15-05 3.96-03 5 586-03	•	1000	
605 04 1.06 03		8,92+0	-Cyanide (CN-) -Cyanogen	57-12-5	2.00-00 s 180-02	528-01 n 548-00		
9.08-02	i k a	and the second	-Cyanogen Bromide	460-19-5 506-68-3	7.00+07 n 1.20+05 7.00+03 n 1.10+05	1		
5.0E-02 6.0E-04	1 8 0E-04 1 V	10040	-Cyanogen Chloride	506-77-4	355-00 # 185-00 135-00 # 185-00			
205.05	1		Potessium Cyanide	74-90-8 151-50-8	130-60 n 130-60 140-62 n 130-60	83E01 N 32E40	# 1936 a	
106.00	1 60		-Potassium Silver Cyanide	506-61-6			Added: a	
1.05-03	4		Sodium Cyanide	506-64-9 143-33-9	7.00-03 n (20-06 n 7.00-03 n (20-08		1,000 M	
- 12H	1 v 1		-Thiocyanates -Thiocyanic Acid	NA.	250 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		2.05-01 n 2.06-02 4.05-00	
5.05-02			Zinc Cyanide	463-56-9 557-21-1	1.00-00 n 2.00-00 n		400-00 p	
-02 H	50E+00 V 1	128-01	Cyclohexane Cyclohexane, 1,2,3,4,5-pents from -6-chan	110-82-7	140-00 na 275-00 n	\$36+03 A 246+04	10040 4	
5.02+00	1-706-01 PV 1	5.15-43	Cyclohexanone	87-84-3 108-94-1	2.66400 o 1.06400 o		1440 1	
23601	P108-00 X V 1		Cyclohexane Cyclohexylamine	110-83-8	111-5	e 7.38+02 e 0.16+05 L 1.05+00 h 4.66+03	. 12-5	
2,90,02	1	0.1	Cyfluthrin	108-91-8 68359-37-5	100-00 n 2.06-00 n		120 0	
50 .00			Cyhalothrin Cypermethrin	68085-85-8	\$35+08 n 415+03		1	
7.8503 E.O. J. B.SE.OS C	F	0.1	Cyromazine	52315-07-8 66215-27-8	4.75+02 ti 6.25+03 ti		188	
E-01 8.0E-05 C	- v - i	0.1	DOC . p.p'-	72-54-8	2.95+00 c 9.85+00 c	416-02 - 166-01		
-01 9.78-05 5.08-04	1	0.09 0.1	DOT	72-55-9 50-29-3	TOTAL STATE OF THE	2860 (260	1460 2	
OZ C SIEGN C TOPOT	1	0.0	Dalapon Daminozide	75-99-0 1596-84-5	1.00+03 n 2.00+04 n		1000 1 2000	
04 1 705.05	1	0.4	Decabromodiphenyl ather, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1596-84-5 1163-19-5	4.但4位 1 13E4位 1	644-01 v 248-00 (A	
40 1 101291	† +	6)	Demeton DI(2-ethythexyl)adipate	8065-48-3	12:30 J 12:30		4360	
-02 H		0.5	Diallate	103-23-1 2303-16-4	200 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
799	2 v i		Diazinon Dibenzothiophene	333-41-5 132-65-0	4.40+03 n 6.76+03 n	14.	100-00	
-01 P 6.0E-03 P 2.0E-04	P 205-04 1 V M 1	9.88+02	Dibromo-3-chloropropene, 1,2-	96-12-8	1.20-03 6 AVE-02 #	1.76-04 s 2.06-03 s		
M 1 205.02	î û i		Dibromobenzene, 1,3- Dibromobenzene, 1,4-	108-36-1 106-37-6	3.18-01 0 4.78-02 0 7.88-02 0 1.38-04 0 6.58-00 0 2.88-04 0		1300	
-02 20E-02 +00 9.0E-04 9.0E-05	J V 1	9.0E+02	Dibromochloromethane Dibromoethane, 1,2-	124-48-1	8.50+00 a 3.00+00		1.8-00 x	
30544	40E-03 X V	2.05+05	Dibromomethane (Methylene Bromide)	106-93-4 74-95-3	3 (40) 5 (180) 9 2 (40) 1 (180)	435-00 1 205-00 P		
3.05-02		0.1	Dibutyttin Compounds Dicamba	NA NA	1.00+01 n 2.00+02 n	#100-400 U F100-401 U	5.000 n	
43E-03 P	v i	変数の数数 1 アンド	Dichloro-2-buttone 1.4.	1918-00-9 764-41-0	1800 0 2800 n		5 Test 8	
4.25-03 P	* *	5.28+02	Dichloro-2-butene, cis-1,4- Dichloro-2-butene, trans-1,4-	1476-11-5	7.4E45 6 32E402 6	1.78-04 1 1.0E-04	1340	
62 40E65		0.1	Dichloroscetic Acid	110-57-6 79-43-6	746-00 0 926-00 0 1 16-01 er 486-01 er 1 26-00 ma 8 26-00 ma	87504 0 19505 c	1.98.40	
03 C 1.18-05 C 7.08.09	1 2.0E-01 H V 1	3.01+02	Dichlorobenzene, 1,2- Dichlorobenzene, 1,4-	95-50-1	1.00-00 pp 0.00-00 pp	\$16+02 n 0.00+02 n	100 7 600	
01 3,4E-04 C			Dichlorobenzidine, 3,3'-	106-46-7 91-94-1	2.65+00 0 1.15+01 4 1.25+00 0 8.15+00 0	2 E 01 9 1 1 E 09 9	4.00 s 7.00 m	
2.08.09	TIMESTER T	0.1	Dichlorobenzophenone, 4,4'- Dichlorodifluoromethene	90-98-2	5.70+02 n 7.46+03 n		7.00mm n	
03 C 16E-08 C 20E-01	X 706-03 P V	の という	Dichloroethane 11.	75-71-8 75-34-3	875-01 # \$75-02 n 386-00 1 (86-0) 0	100+00 n 4-0000 n	200400 6 246400 8	
5.05.02	1 20501 IV 1	3.05+00	Dichloroethane, 1,2- Dichlomethylane, 1,1-	107-06-2	4.8601 e' 2.06+00 e'	1.1501 # 47E-81 #	STRUCK OF STRUCK	
208-00 208-02	. v .	12.6	Dichloroethylene, 1,1- Dichloroethylene, 1,2-cis-	75-36-4 156-59-2	2.75-02 s 1.05+00 s	2.18-02 s 8.88-02 s		
508.03	, v 1	NOTE THE RESIDENCE AND ADDRESS OF THE PARTY	Dichloroethylene, 1,2-trans- Dichlorophenol, 2,4-	156-60-5	1,85400 11 2,35404 14	2.903	3-32-7	
10£40 806-03	· · · · · · · · · · · · · · · · · · ·	10.5	Dichlorophenoxy Acetic Acid, 2.4-	120-83-2 94-75-7	1篇2 		ALESSO B	
-02 C 10E-05 C 50E-03	A 405-03 1 V	61 1	Dichtorophenoxy)butyric Acid, 4-(2,4- Dichtoropropene, 1,2-	24- 02-0	5.1E-02 8 5.8E-03 8			
20E-02	P V 1	1.02+03	Dichloropropane, 1,3-	78-87-5 142-28-9	1.02-00 - 4-02-00 -	2#40 ¢ 1#400 ¢	440 C 3000	
The second secon	1 2.08-62 IV 1	0.1	Dichloropropenol, 2,3- Dichloropropene, 1,3-	616-23-9	T.EE+00 n 2.55+00 #		- A - C - C - C - C - C - C - C - C - C	

Column	. cancer, n = noncancer,	= where: n SL	#27); H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see L <100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Cor Contaminant	ncentration may e.	cour cenny min (399 Oser Guide),	Screening Levels	Protection of Ground Water S
Base Fig.	Toxicity and Chemical-specific Information		- Containing the Cont				
Second S	o e un e max. e max e maxe		Analyte			tery (march least teacher) have tack it have foots	
Color Colo	1 3 00 C 500 04 508 04 1 0				1.0E+00 c* 7.0E+00 6.5E+00 n 6.25+01		
	A CONTRACTOR OF THE PROPERTY O			77-73-6	1.3E+00 p 5.4E+00	n 51801 n 14600 A 54801 A	19. 20.
The content	51 1 486-03 1 8.06-85 1 1 0			NA.		1450 4 4500 4	
Table	108.03 P 208.04 P 1 0	1	Diethanolamine		1,35400 8 1億400	1 723 1 123 1 123 1	
Company Comp			Disthylene Glycol Monoethyl Ether	111-90-0	3.8E+03 n 4.8E+04	n 5.15-01 is 1.00-00 in 1.00-00 in	
Company Comp	108-00 P V 1		Diethylformamide Diethylstilbestrol	56-53-1		* 186.00 : (26.01 : \$.16.05 ·	
Company Comp			Difenzoquet	43222-48-6			
Company Comp	206-02 1 4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.42-05	Diffuoroethane, 1,1-	75-37-6	436-04 m 136-05		
1,000 1,00	e crance C V 1		Dihydrosafrole Disopprovi Fiber	108-20-3		na 7 200 to 3 100 to 100 to	
1.00	6042 I V 1	530-00	Disopropyl Methylphosmone		1.00+03 n 1.00+04	n 430-40. s	
			Dimethoste	60-51-5	1,56+0) 0 1,65+00	<u>. 1999 1</u>	66.6 800a
Part	9 6	2.5	Dimethoxybenzidine, 3,3'-		\$2E+02 o' 14E+03		
10 12 12 12 12 12 12 12			Dimethylamino azobana (B)		12501 6 50541	1 2200 1 1400 1 1400	
P		6 PR 1 1 TO 1 15 15 25	Dimethylaniline, 2,4-	95-68-1	2.7E+00 o* 1.1E+01		14
C 1860	28600 (V 1	8.35+02	Dimethylanilline, N,N-	119-93-7	496.02 6 216.01		
### ### ### ### ### ### ### ### ### ##		1.12+05	Dimethylformamide		2.00403 B 1.00104	a tree a small a distribution	
### ### ### ### ### ### ### ### ### ##		1,7E+05	Dimethylhydrazine, 1,1-	540-73-8	2.02.04 a 4.16.03	* 1840 * 1750 * 1840 *	
### ### ### ### ### ### ### ### ### ##	20202 1 1	0.1	Dimethylphenol, 2.4-		3.00-01 N 4.00-02		
Section Sect		44	Dimethylphenol, 3.4-	95-65-8	8.35+01 0 8.25+02 4.45+01 A 4.55+02	22501 4 94501 4 13001	
2006-09 1 1 1 1 1 1 1 1 1	22 C135435 C V 1	4.75+02	Dimethylvinylchloride Dinitro-o-cresol, 4.6-	534-52-1		1 1899 1	AND THE RESERVE OF TH
1.00 1.00	205.00 1		Dinitro-o-cyclohexyl Phenol, 4,6-		A35-00 A 35-01	1,000	
Province	10001 1 1 1	0.1	Dinitrobenzene, 1,3-	99-65-0	2.5E+00 0 5.7E+01		
1 1 1 1 1 1 1 1 1 1				51-28-5		a 445-01 a	
Section Sect	en r	0.1		121-14-2	1 TEACH 01 TEACH		
### 2,200 1 1,000 2,000			Dinitrotoluene, 2.6-	606-20-2			
Second S		300	Dinitrotoluene, 4-Amino-2,6-	19408-51-0	1.56+02 n 2.56+03		
1,200.00 1,200.00 1	er e seen x 1	0.5		88-85-7	8.36+O1 A 8.26+O1	a 100-bs a 700-	9
1 1 1 1 1 1 1 1 1 1	01 \$00.00 \$00.00 \$00.00 V 1	122.40	Dioxane, 1,4-	123-91-1	3.85+00 e 2.45+0+	1850 / 2850 / 4860 F	
GG C 1.88-er C 3.55-14		0.03	-Hexachlorodibenzo-p-dioxin, Mixture		105-04 1 476-04	* 139 + 169 * 189 * Luc	140
Second	ON DISCOUNT OF TORSES I ADMINISTRATIVE			1746-01-6 957-51-7	1.97+03 0 2.55+04	6,30×02 n	
9 1 278-04 1 28-00 1 2	88504 X 1	0.1	Diphenyl Sulfone	127-63-9	5:16+01 n 6:66+60	0 3.18-90 n	
Display Disp				122-86-7	48E-01 e 29E+00	· 1940 · 1850 · 786 ·	
Direct Blue 6 2007-6-2 2008-2 2	1260				120 2 324		
1,000 1	00 0 14601 0 T	0.1	Direct Blue 6	2602-46-2	7.95-02 to 3.15-01	2 20505 4 A0505 4 13607 61	
1 1 1 1 1 1 1 1 1 1	400 C 148-01 C		Disuffoton	298-04-4	2.6E+00 + 3.9E+01	n Add a	
### ### ### ### #### #################	108-02 1 Y 1	30.38			1,35-02 1 1,55-03	I Section 1	280
### Rogulfan F. Rogulfan 14-77-3 158-02 18-79 8 18-79			Dodine	2439-10-3		A 200-00 h	
Section Sect	2月曜 1 ・ ・ ・ ・ ・			115-29-7	478-03 6 7.08-00		
Section Sect	20042 1 1	0,1	Endothall		1.36+03 n 1.66+04 1.86+05 n 2.86+02	1150 1 105	**************************************
### Comparison C		1.15+0	Epichlorohydrin	106-89-8	1,05+01 n 8,75+01	1 100 1 100 1 100 A	
Section Sect	The second secon		#Epoxybutene, 1,2- Ethanol, 2-(2-methoxyethoxy)-	111-77-3	.2.8E+63 n 3.3E+04	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
### 111-15-9 2,00-00,00 1 1,00-000 1 1,00-00 1 1,00-00 1 1,00-00 1 1,00-00 1 1,00-00 1 1,00-00 1	100 1 1	0.1	Ethephon		5.78+00 0 4.18+00 5.26+00 0 4.18+00	3361	
### P 2014 1 V 1 1,1848 Encychand 2- 11020-5 12-12-12-12-12-12-12-12-12-12-12-12-12-1		2.45+0	Ethoxyethanol Acetate, 2-	111-15-9	2.00+03 n 1.46+04	* 4.00-05 a 8.00-00 ti 1.20-02 ti	
	9.05-01 P 2.08-01 1 V 1	1.15+0	Ethoxyethanol, 2-	141-78-6		1 1946 1 1960 N 1964 N	333
### 147-855 A.EPH 147-855 A.EPH 147-855 A.EPH 147-855 A.EPH 158-95 A.E	SOROS PEDEOS PV 1	2.55+0	BEthyl Acrylate	140-88-5	A78+01 a 2.18402		W 9

		FAQ \$27); H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of W n SL < 100X c SL; *** = where n SL < 10X c SL; SSL values are based on Di Contaminant			Screening Levels	Protection of Ground Water SS
SPO LIR MED. MED.	I men GAVER ARE (mg	Analyte Analyte	CAS No.	Resident Soil Instructed Co (Instructed Soil Instructed Co	Tanada Na Indiana Na Tanada Nasa	Treatment of Glocina Waller So
1E-02 C 25E-08 C 10E-01 1 10E-00 1	1 01	Ethyl-p-nitrophenyl Phosphonete	97-63-2 2104-64-5	1.05+05 to 7.65+03	Hard Courter hard Lawrence hard Court have county	92 97:
7.05.00 P	1 01	Ethylbenzene Ethylene Cyanohydrin	100-41-4	5.8E+00 2.9E+00	* 1.15-00 * 4.96-00 * 18-00 * 18-00	
905-02 P 206-00 I 405-01 C	V 1/18	105 Ethylene Diamine	109-78-4 107-15-3	4.46+05 n 5.76+04 7.06+03 n 1.16+08	1/45/03 0	
10501 1 180400 1	1 0.1	Ethylene Glycol Ethylene Glycol Monobutyl Ether	107-21-1	1.35-455 mm 1.86-518	107 426 0 1 1860 1 1860 1 1860 1 1	SV SV
1E-01 C SAFEGS C SONE-02 C SE-02 C ISE-03 C SONE-03 I SE-01 C ISE-02 C	128	Ethylene Oxide	75-21-8			
98-01 C 196-02 C	/ 1年	66 Ethyleneimine	96-45-7	1.06-01 0 7.06-01 6.16-00 n 5.16-03 2/76-00 c 1.26-02	7 1250 : 160 : 150 : 1 1250 : 160 : 160 :	
256-04 1	1 0.1 1 0.1	Ethyliphthalyl Ethyl Glycolate Fenamiphos	84-72-0	1.0E+05 pm 2.5E+08	4 155-04 1 E65-04 1 1-604 4 605-04 1	
29-62 79-03 19-03	1 67	Fenpropathrin	22224-92-6 39615-41-8	185-00 0 2.16-00 185-00 0 2.16-00	* CAROL 4	
	1 4	Forvalerate 4	51630-58-1	1,0000 N 218404		
40500 C 13500 C 63500 1 13500 C		Fluoride Fluorine (Soluble Fluoride)	2164-17-2 16984-48-8	3.16+03 m 4.70+04	8 800-75 A 1 1-80-01 A 0.78-01 A 0.00-01 B 1 1-80-01 B 0.78-01 B 1.28-03 A 100-02	
608-00 708-00	1 63	Fluridone	7782-41-4 59756-60-4	475-000 B 7.00-004 8.18-000 D 888-004	* 1-60-01 n 6-76-01 n 8-06-02 n n 1-60-01 n 6-76-01 n 1-26-03 n 4-26-03	
79-96 69-62	1 01	Flurprimidol Flusilazole	56425-91-3	132405 0 1.00404	122	ă ·
105-02	1 03 1 01	Flutolani!	85509-19-9 66332-96-5	4.4E+01 # 8.7E+02	1 1(840) A	
10501	1 01	Fluvalinate Folpet	69409-94-5	0.50+02 n 0.20+03	A MARLON LA	
20503 4	9 0.1 1 0.1	Fomesafen Fonofos	133-07-3 72178-02-0	1.000-02 0 5.00-02 2.00-00 2 1.20-01	200-a 2	
1.3E-05 2.0E-01 R.BE-03 A.V	1 4.28+	Of Formaldehyde	944-22-9	1.3E+02 a 1.6E+03	1200 C 3000 C 1300 C	
9.0E-01 P 5.0E-04 X 1	1 01	Of Formic Acid	50-00-0 64-18-6	1.76+01 p* 7.36+01 2.86+01 n 1.8+02	7 1260 5 1440 5 4340 6 1160 5 1440 5 4340 6	
108-01 X		Furans	39148-24-8	1.95+08 pm 2.55+08	mm addition is	
105.03	1 000	-Dibenzofuran	132-64-9	7.36+01 n 1.06+03 7.36+01 n 1.06+03	0 Young a	
E+00 H 9/9E-01 1 2/9E+00 V	1 000 178-	-Tetrahydrofuran	110-00-9 109-99-9	7.5E+04 n (.DE+03 7.8E+04 n s.4E+04	0 198-01 8 198-01 8	
3.0E-03 (5.0E-02 H/V	1 1.05+	Furazolidone	67-45-8 98-01-1			
-00 C 43504 0 -02 1 68508 0	1-81-	Furium Furmecyclox	531-82-8	2.18+02 h 2.88+03 3.88-01 é 1.88+00	A 525401 A 235402 A 545401 B	
40E04 1	1 01	Glufosinate. Ammonium	60568-05-0 77182-82-2	2.18+02 h 2.78+05 5.78-05 4 1.82+00 1.78-01 6 7.78+01 2.58-01 n 5.38+02	5 33E-01 6 14E-00 6 13E-00 6	
405-04 1 1,0500 9 1	1 1.054	Glutaraldehyde Glycidyl	111-30-8	1.15+08 nm 4.65+05 2.95+01 ii 2.15+02	nn saean saean s	
1.08.01 I 1.08.02 X V	1 01 .	Glyphosate Guanidine	765-34-4 1071-83-6	2.0E+01 1 2.1E+02 8.0E+03 4 8.2E+04	1 DEG 1 AEGO 1 TEGO 1	
2.08.42 P 6.08.46 I	1 01	Guanidine Chloride	113-00-8 50-01-1	7.85-00 8 1.75-04 1.95-00 8 1.85-04	1000	
1-00 138-05 508-04 V	1 01	Haloxyfop, Methyl Haptachlor	69806-40-2	3.25+00 n 4.16+01	784	
205-00 206-00 136-06 V	1	Heptachlor Epoxide	76-44-8 1024-57-3	1.00 0 0.00 or 7.00-00 27 3.00 or	· 128 · 128 · 128 · 128	
2.05-04 (Hexabromodiphenyl ether, 2.2',4.4',5,5'- (BDE-153)	87-82-1	1.0E+02 n 2.5E+03	· (1800 - 1800 - 1800 - 1800)	
00 1 225 05 10E-03 P	1 1774	lexachlorobenzene	68631-49-2 118-74-1	1.06+00 s 1.66+00 2.18-00 e 5.08-00 1.28+00 e 5.08+00	* 1840 · 2744 · 1850 · 1950	
+00 1.8E-03 8.0E-05 A	1 01	Hexachlorocyclohexane, Alpha-	87-68-3 319-84-6	12000 4 536400	4 1.00401 c 6.00401 a 1.00401 a	
+00 C 3.1E-04 C 3.0E-04 (1 004	Hexachlorocyclohexane, Beta- Hexachlorocyclohexane, Gamma- (Lindane)	319-85-7	5.00-07 0 1,38-00 5.76-01 0 2,56-00	* 150 + 150 + 150 + 1	
+00 5.15-04 6.0E-05 2.0E-04 V	1 01	Hexachlorocyclohaxana Tachnical	58-89-9 608-73-1	57E-01 V 2.5E-00	2 8.1840 a 4.000 a 4.000 at 2.0000	
-02 1.1E-05 C 7.0E-04 3.0E-02 V	1	Hexachlorocyclopentadiene Hexachloroethane	77-47-4 67-72-1	3.05-01 6 1.98-00 1.88-00 6 7.86-00	1 2160 1 124 1 1450 2 LINGS	
-01 3.05-03	- 1 81 -	Hexachiorophene	70-30-4	1.000-00 of 8.00-00 1.00-00 n 2.00-00	C 2000 4 18100 4 5000 C	
105.05 I V 406.04 P	1 3,45+0	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4 822-06-0	1.85-00 / 2.85-00 2.15-00 / 2.85-01 3.15-00 / 1.35-01	· 788 2	
70E01 1 V	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Hexamethylphosphoramide	680-31-9	2.05+0) 1 3.35+00 4.16+02 m 2.05+03	n 105-02 n 4-46-00 n 1/16-02 n	
2.05+00 P 5.05-03 I 3.05-02 I V	1 91	Hexanedioic Acid	110-54-3 124-04-9	6-16+02 ns 2-06+03 1-36+05 nm 1-06+08	m 7.86-00 h 5.18-05 h (86-06 s	
	- 134-0	Hexarione, 2-	591-78-6	2.0E+02 n 1.3E+03	5 3.18-07 s 1.38-02 s 3.85-07 s	
25E-02 1 8.6E-04 1	1 01 1 01	Hexythiazox Hydramethylnon	51235-04-2 78587-05-0	2.1E+03 n 2.7E+04 1.8E+03 n 2.1E+04		
-00 496-05 506-05 P.V -00 496-05		Hydrazine	67485-29-4 302-01-2	1.68+01 N 2.08+02 2.98-01 0 1.18+03	1 1840	
1.0549 I V		Hydrazine Sulfate Hydrogen Chloride	10034-93-2	2.3501 0 1.1E402		
40E00 C14E00 C1 20E00 1 V		Hydrogen Fluoride	7647-01-0 7664-39-3	2.95401 s 1.16400 2.86407 nm 1.25408 3.16408 n 4.76404	net 2.18+0) A 5.08+01 R 4.28+01 B	
-02 P 406-07 P	1 61	Hydrogen Sulfide Hydroguinone	7783-06-4	2. 原代版 · / / / / / / / / / / / / / / / / / /	0 100-00 0 110-00 1 200-00 0 00 210-00 1 200-00 1 200-00 0	
(M-02)	1 01	mezalii	123-31-9 35554-44-0	8.0E+00 s 3.8E+01	1940 1	
100 di	1 01	mazaquin mazethapyr	81335-37-7	146404 8 216405	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
10E-02 A 40E-02 1	1 01	Jodine	81335-77-5 7553-56-2	18年64 n 2.18408 i 7.8年6日 n 1.38404	NI A75-03 x	

	Cancer, n = nors	cancer; = where; n Si	< 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1 Contaminant	m × Concentration may exc	1 2.3 S; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide) for Ansenic no ucceed celling limit (See User Guide); s = Concentration may succeed Cost (See User Guide) Protection of Ground Water Screening levels Prote
161	ity and Chemical-specific Information		Containment		Threaden's Sale (market)
	POC. PCC. O INUS.	Cur Vine Alles (market)		CAS No. 7439-89-6	(major) New
	10E-01 P	A CONTRACT REPORT AND A STREET	ron sobutyl Alcohol	78-83-1	
O4 1	2.0E-01 1 2.0E+00 C	0.1	sophorone sopropalin	78-59-1 33820-53-0	(#F+00 p 166+04 n A09-01 n
	1.55-00 I V 2.05-00 P 2.05-01 P V		sopropanol sopropyl Methyl Phosphonic Acid	67-63-0 1832-54-8	6 SE-103 D 6 256-04 D 2 (SE-05 D 2
	1.0E-01 1 5.0E-02 1	1 01	soxaben	82558-50-7 NA	\$25-00 n 4:10-00 n 120-00 n 120-00 n 4.50-00 n 4.50-00 n 120-00 n 120-00 n 120-00 n 120-00 n 120-00 n
	3.064H A V 2.08403 1	T • 0.1	up-7 actofen	77501-63-4	1,35-00 s 1,35-03 s 2,55-01 t
			Lead Compounds	7758-97-6	30E-01 - 428-00 - 4 63E-01 - 425-05 - 4 65-0 - 4 65-0 - 4 65-00 -
N 0 1550 C	20525 C 20554 C M G	7	Lead Phosphate	7446-27-7 301-04-2	2,000 2,000 2,000 2,000 2,000 3
9 C 136-06 C		1 01	-Lead and Compounds	7439-92-1 1335-32-6	100 100 100 100 100 100 100 100 100 100
on C126-06 C		1 0.1	Lead subscetate -Tetraethyl Lead	78-00-2	7,05.05 1,125.07 0 1,56.05 0
	1.05-07 I V 5.05-06 P V	1 100-00	Lewisite Linuron	541-25-3 330-55-2	1.55+02 m 1.65+03 m 3.55+03 m
	2.06-05 2.06-05 P	1 0.1 1	Lithlum	7439-93-2 94-74-6	1.66-40 1 276-40 1 A76-40 1 776-40 6
120	50504 1 10503 1	9 0.1 1 0.1	MCPA MCPB	94-81-5 93-65-2	530-00 n 520-03 n 150-00 n
100	1,05-03	1 01 1 01	MCPP Maiathion	121-75-5	1.35+05 n 1.05+04 n
	20502 1 10501 70504 C	1 0/1	Maleic Anhydride Maleic Hydrazide	108-31-6 123-33-1	3.25-04 n 4.16-05 mh 3.06-04 h 1
	50E-01 1	1 61	Malononitrile	109-77-3 8018-01-7	8.56-00 n 8.26-00 n 3.46-00 n 4.46-00 n 4.46-00 n
	3.0E-02 H 5.0E-03	1 0.1	Mancozeb Maneb	12427-38-2	S26-19 n 5.16-105 n 9.66-105 n
	148-01 1 508-05 1	The second second	Manganese (Diet) Manganese (Non-cliet)	7439-96-5 7439-96-5	1.85+05 n 2.85+06 n 5.35-02 n 2.05-01 n 4.85+02 n
	ACCESS H	01 1 01	Mephosfolan	950-10-7 24307-26-4	136-00 s 746-01 h 148-00 s
	5.05-03 1	1 6/	Mepiquat Chloride Mercury Compounds	7487-94-7	
1000000	308-04 308-04 \$ C	197	-Mercuric Chloride (and other Mercury salts) -Mercury (elemental)	7439-97-6	2.85-(1) n 3.85-(2) n 3.45-(3) n 1.85-(4) n 1.85-(4) n 2.85-(4) n
	100.04 (1	-Methyl Mercury -Phenylmercuric Acetate	22967-92-6 62-38-4	7,85-60 n 1,28-60 a 806-60 n 8,18-60 n 7,88-60 n
	5.05-05 V	1 - 01	Merphos	150-50-5 78-48-8	\$15-00 h \$15-00 f 150-00 h 150-00 h \$25-00 h 150-00 h 150-00 h 25-00 h 150-00 h 350-00 h 25-00 h 150-00 h 750-00 h 150-00 h 150-00 h
1.40	3,08-06 8,05-02	1 21	Merphos Oxide Metalaxvi	57837-19-1	3.65-00 # 4.98-04 D 1,05-00 # 1,05-0
	1.0504 1 3.05-27 P V	4.05+0	Methacrylonitrile Methamidophos	126-98-7 10265-92-6	3.22+00 4 4.5+00 0
100	8.06-06 2.06+00 2.08+01 V	1 L1519	Methanol	67-56-1 950-37-8	128-15 per 125-155 min 2-15-15 n 888-15 n 888-15 n 1
	10040	1 0.1 1 6.1	Methidathion Methomyl	16752-77-5	1 85-103 N 2 18-104 D 5008-02 N
02 C 1.4€-05 C		1 91	Methoxy-5-nitroaniline, 2- Methoxychior	99-59-2 72-43-5	THE RESERVE TO SERVER A SERVER AS ASSESSED.
	SOCO PISCO PV	1.2810	BMethoxyethanol Acetate, 2-	110-49-6 109-86-4	3.85+02 n 3.55+03 n 2.15+01 o 8.65+01 h 2.65+01 h
	5.05-05 P 2.05-02 1 V	2.95+0	Methoxyethanol, 2- Methyl Acetate	79-20-9	7.88-04 mg 1.28-03 com 2.08-07 m 2.08-07 m 2.08-07 m
70.00	200-01 P V	1 03640	Methyl Acrylate Methyl Ethyl Ketone (2-Butanone)	96-33-3 78-93-3	2.78-04 n (188-08 nm 5.35-05 n 2.28-04 n 5.88-08 n 1
1.08-03 X	1,08-03 P 2,08-06 X V	NAME OF TAXABLE PARTY.	Methyl Hydrazine Methyl Isobutyl Ketone (4-methyl-2-pentanone)	60-34-4 108-10-1	\$35-04 to \$46-00 ton \$46-00 t \$36-00 t \$36-00 t
100000	5.05+00 1 V 1.05-02 C V	4 0040	Methyl Isocyanate	624-83-9 80-62-6	455-00 8 156-01 8 156-00 8 5-66-00 8 146-00 8
	1,42400 7,08401 V 2,5544 1	1 2.42+0	Methyl Methacrytate Methyl Parathion	298-00-0	1.664CF n 2.16402 n 4.564CF N
	6.05-02 X	4 61	Methyl Phosphonic Acid Methyl Styrene (Mixed Isomers)	993-13-5 25013-15-4	\$86-00 0 486-04 0 138-05 0 138-05 0 138-05 0 138-05 0 1
-02 G 238E-08 C		1 01	Methyl methanesulfonate	68-27-3 1634-04-4	5.00-00 c 2.00-001 c 1.00-00 c 4.00-00 c 7.00-00 4 4.70-00 c 2.10-002 c 1.10-00 c 4.70-007 c 1.00-00 c
-03 C 2.55-07 C	3,06+00 V 3,06-04 X	1 0.1	Methyl tert-Butyl Ether (MTBE) Methyl-1,4-benzenediamine dihydrochloride, 2-	615-45-2 99-55-8	
.cs e	101-01 X	1 01	Methyl-5-Nitroaniline, 2- Methyl-N-nitro-N-nitrosoguaridine, N-	70-25-7	8 40 CO 0 2 M O 0 1 X CO 0 3 K CO 1 3 K CO 0
400 C 3/6/00 C		1 01	Mathytaniline Hydrochloride, 2- Mathytansonic acid	636-21-5 124-58-3	8 12 4 CE (CE 4 CE 4 CE 4 CE 4 CE 4 CE 4 CE
	1,08-02 A 2,08-04 X	1 8	Methylbenzene 1-4-diamine monohydrochloride, 2-	74612-12-7 615-50-9	1 26-00 11 1,65-02 1
-01 X	30804 X	1 0.1 1 6.1	Methylbenzene-1,4-diamine sulfate, 2- Methylcholanthrene, 3-	56-49-5	588-03 c (06-01 c 1.60-04 c 1.86-03 c 1.76-03 f)
E49 1.0E48_1	easos i sasoi į v. W.	1 3.254	Methylene Chloride Methylene-bis(2-chloroanitine), 4,4'-	75-09-2 101-14-4	\$75-00 07 105-00 07 105-00 07 125-00 07 125-00 07 505-00 07 125-00
501 P 43504 C	2000 P W	1 0.1 1 0.1	Mathylene-bis(N.N-dimethyl) Aniline, 4,4-	101-61-1 101-77-9	128+01 a 508+01 a 225-01 a 8-65-01 a 4-65-01 f
6400 C 448-04 C	2 05 08 C	1 0,1 1 0,1	Methylenebisbenzenamine, 4,4'- Methylenediphenyl Dilsocyanate	101-68-8	8.08+00 nm 3.08+10 nm 6.38-01 n 2.08+00 n
	7,05:02 H V	5.0E+	Methylstyrens, Alpha- Metolachior	98-83-9 51218-45-2	5.55-400 ns 8.25-404 ns 7.85-402 n 9.05-409 n 1.25-406 nm 2.75-409 n

The Walter	city and Cher	nical-specific Information		Contamin ti			= mutagen; S = see user guide Section 5; V = volatile; R = RBA a s = Concentration may exceed Csat (See User Guide) Screening Levels	Protection of Ground Water SS
SFO a SUR a	FDD.	BERC DE MILITARE	ABS ABS (District			Resident Stall Industrial Stall	Provident Air Industrial Air Tomason and	
	2.5E-02 2.5E-01		1 0.1	Metribuzin Analyte	CAS No. 21087-64-9	(mated law treated)	tion teacher tree county tool costs have the	1
7.479	3.0E+00	, v	1 0,1 1 5,45.01	Metsuituron-methyl TIIC_1 C	74223-64-6 8012-95-1	1.58+04 × 2.18+05		
AE+01 C 5.1E-05 C	2,0E-04 2,0E-03	. v		Mirex	2385-85-5	2 Krist and 2 Krist 3 Krist 177.01	1 1860 1 1800 1 1800 1	
	5.08-63 1.08-01	i	1 0.1 1	Molinate III C L. C	2212-67-1 7439-98-7	1.3E+02 n 1.6E+03	1 100-01 6	
	206-03	l P	1 01	Monochloramine Monomethylaniline	10599-90-3 100-61-8	7.88+00 n 5.88+00 7.88+00 n 1.88+00 1.88+00 n 1.88+00	1 100-100 m non 200-100 m 400	
	18502		1 01	Myclobutanil	88671-89-0	1.65-00 n 2.15-04		
	20E-03	î v	•	N.N'-Diphenyi-1,4-benzenedlamine Nated	74-31-7 300-76-5	1,650 N 215194 1,650 N 2,650 2,650 N 2,560	1000	
8E+00 C 0.0E+00 C		X 1.05-01 P.V	1 01	Naphtha, High Flash Aromatic (HFAN) Naphthylamine, 2-	64742-95-6 91-59-8	2.30+03 H 2.50+04 3.00-01 / 1.30+00	1 100-00 a A40-00 a 100-00 a	
2004.0	1.0E-01	1	1 61 1 61	Napropamide Nickel Acetate	15299-99-7	8.3E+05 a 5.2E+64	1 184 C 4742 C 2848	
26E-04 C	111.02	9 1.4E-06 C	 3 	Nickel Carbonate	373-02-4 3333-67-3	8.78-08 n 8.18-08 8.28-08 n 1.18-08	TRANSPORTED A TRANSPORT OF THE PROPERTY OF THE	
26E04 C	1.15-02	C 148-05 C V 0 146-05 C 0) 04	Nickel Carbonyl Nickel Hydroxide	13463-39-3 12054-48-7	· · · · · · · · · · · · · · · · · · ·		
286-04 C 246-04 T	1,18-02	C 2.0E-08 C 0	04 04	Nickel Oxide	1313-99-1	520 n 196-04 (基格	THE RESERVE AND ADDRESS OF THE PARTY OF THE	
2.6E.04 C	205.00	1 0.05-00 A 0	04	Nickel Soluble Salts	NA 7440-02-0	8.26+02 n 1.16+04 1.66+03 n 2.26+04	a 1200 4" 多格型 4" LMH A	
.78400 G 4,8604 T 2,88604 G	1.15.02	C 14E-05 C 0 C 14E-05 C	04 1 =0.1	Nickel Subsulfide Nickelocene	12035-72-2 1271-28-9	4.1E-01 # 1.8E+00		
	1,62+00	1	1	Nitrate Nitrate + Nitrite (as N)	14797-55-8	6.7E+02 N 8.1E+05 1.3E+08 nm 1.9E+06	* 1.1502 e* 4.7843 e* 2.5640 b 	
100 300 200	1.05-01	1	i e	Nitrite	NA 14797-65-0	7.66+05 0 1.26+05	m Zani-rib n Topi	
0E-02 P	機器	P 8.0E-00 P	81	Nitroaniline, 2- Nitroaniline, 4-	88-74-4 100-01-6	1.76-00 n 8.06-00 2.76-01 o 1.16-02	8 525-02 0 225-01 n 199-03 n	
405-05	205-09	1 9.08-03 I V	1 3,12+03	Nitrobenzene Nitrocellulose	98-95-3	5.1E+00 & 2.3E+01	of 6.35-03 in 2.66-00 in 5.66-03 of of 7.65-03 in 5.16-01 in 1.66-01 of	
3E+00 C 37E-04 C	7.06-02		6 61	Nitrofurantoin	9004-70-0 67-20-9	1.8E+08 rm 2.8E+08 4.4E+03 n 5.7E+04	m ####################################	
7E-02 P	1.06-04	9	1 0.1 1 0.1	Nitrofurazone Nitroglycerin	59-87-0 55-63-0	4.75-01 × 1.66+00	. 7.65.03 s 5.96.40 s 6.95.40 s	
8/85-00-7	1.05-01	605-03 P V	1 0.1	Nitroguanidine	556-88-7 75-52-5	8-80-03 N 825-03 8-80-03 N 828-04 8-46-03 or 2-46-03	0 400-10 H	
2.7E-03 H		605-03 P V 258-02 I V		Vitropropane, 2-	79-46-9	545-05 or 2,45-01 146-22 4 608-03	1989 - 1980 - 2855 - 1989 - 1989 - 1889 -	
2E+02 C 3.4E-02 C	and the same	, i	0.1	Nitroso-N-ethylures, N- Nitroso-N-methylures, N-	759-73-9 684-93-5	1.05.03 4 1.95.00	1000 1000 1000	
46+00 1.86-00 0E+00 2.0E-05 C		v	0.5	Nitroso-di-N-butylamine, N- Nitroso-di-N-propylamine, N-	924-16-3 621-64-7	7800 · 1950	1.46.05 × 7.76.00 × 2.76.00 ×	
86-00 8.0E-04 C 56-02 4.3E-02	digital.		01	Nitrosodiethanolamine, N- Nitrosodiethylamine, N-	1116-54-7	1,0501 4 43501	1 3 00 05 0 1 00 03 1 2 00 00 0	
16+01 1,45-02 96-05 2,55-05 C	6.0E-08	F TOEOS X V II		Nitrosodimethylamine, N-	55-18-5 62-75-9	A15分 : 1至分	AND SECURITY OF THE PROPERTY O	66V 310
25+01 856-03 C		v ·		Nitrosodiphenytamine, N- Nitrosomethylethylamine, N-	86-30-8 10595-95-6	1.18402 6 478402 208400 6 818400	(E-6) - (E-0) - (E-0)	
4E+00 C 2.7E-03 C			0.1	Nitrosomorpholine [N-] Nitrosopiperidine [N-]	59-89-2 100-75-4	546-02 - 146-01 546-02 - 146-01	1 12-0 1 62-0 1 12-0 1 1 10-0 1 12-0 1 12-0 1	
15-00 8,15-04	105-04		21	Nitrosopyrrolicine, N- Nitrotoluene, m-	930-55-2	5.65-02 e 2.65-01 2.65-01 s 1.15-00 0.35-90 n 8.25-01	1.05.00 · 4.05.00 · 4.35.00 · 4.45.00 · 4.45.00 · 1.05.00 · 1.75.00 ·	
2E-01 P 8E-02 P	9.0E-04	v	1,82+05	Nitrotoluene, o-	99-08-1 88-72-2	3:28+00 et 1,86+01	17000 1	
		206-02 P V	0.1 6.00-00	Nitrotoluene, p-	99-99-0 111-84-2	3.46+01 o** 1.65+03 1.15+01 m 7.26+01	2.15-04 × 5.05-07 × 5.05-00 ×	
(A.200) - 100 (A.200) (A.200) - 100 (A.200)	4.0E-02 3.0E-03		0.1	Norflurazon Octabromodiphenyl Ether	27314-13-2	2.5E+03 n 2.3E+04	779-12	
20.00	3.08.43 5.08.42 2.08.43		5.008	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	32536-52-0 2691-41-0	1,96+00 n 2,66+05 2,96+05 n 1,76+04	1000	06/8. 05-10
	5.0E-02		01 03	Octamethyl pyrophosphoramide Oryzelin	152-16-9 19044-88-3	1.3E+03 n 1.6E+03	8 820-03 s 6 810-00 s	
	2.5E-02		8.4 0.1	Oxadiazon Oxamyi	19666-30-9 23135-22-0	128-03 A 418-00 328-02 A 418-03 1.08-00 A 2.18-04	1957	
	3.0E-03 1.3E-02		- 83	Oxyfluorfen	42874-03-3		535e01 a	
	4.5E-03		0.1	Paclobutrazol Paraquat Dichloride	76738-62-0 1910-42-5	200400 - 120404	"New Indiana Control of the Control	
	5.0E-03	- v -	0.1	Perathion Pebulate	56-38-2 1114-71-2	5.85-02 1 458-03 5.96-03 1 5.86-04	Boolds a	
	405-02 205-03		0.1	Pendimethalin Pentabromodiphenyl Ether	40487-42-1	2.0E+03 3 3.0E+04 1.0E+02 % 2.0E+03	1,000-00 m 1,000-00 m 4,000-01 m	
	1.0E-04 . 8.0E-04		0.1	Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	32534-81-9 60348-80-9	1.00-10 to 2.00-10 :		
0E-03 P BE-01 H		v	4,95+02	Pentachlorobenzene Pentachloroethane	608-93-5 76-01-7	636-01 n 636-02 7-76-02 n 3-66-01	0.00000 m 42000 g	
BE-01 H DE-01 5.15-08 C	3.0E-03 5.0E-03	٧	0.26	Pentachioronitrobenzene Pentachiorophenol	82-68-8 87-86-5	275+00 P 1.35+01	12.61-1	
06-05 X	2.00-03	10E+00 P.V	Q1	Pentserythritol tetranitrata (PETN)	78-11-5	155400 n 875400 n	5.000 c 2.4000 s 41500 s 1050	
		MEMBERY 1	3.00	Pentane, n- Perchlorates	109-66-0	8.18+02 ns 3.46+05 n	a 1/8+05 a 4.45+05 a 2.15+05 a	
10 10 10 10 10 10 10 10 10 10 10 10 10 1	7.0E-04 7.0E-04			-Ammonium Perchlorate	7790-98-9	5.00+01 n 5.00+00 5.50+01 n 5.00+02		

Toxicity and Ch	emical-specific Information		L < 100X c SL; " = where n SL < 0X - SL = values - walled or DAF=1 m = maintenance - m		Linear Control Control	Screening Levels	Protection of Ground Water
. I'l an 11 ac.	It as the		1110 110		Paraletine Stall Inclusions Stall	Provident As Industrial As Topograph MC	
مار محمد الراج المحمد والراجد والم		ARS ARS COM	Analyte	CAS No. 14797-73-0	Constant law (charles) in	or (const) loss topins have noted in 1,8240 1 1,8240 a 1,8240	
7.05.04 7.05.04		101	-Perchlorate and Perchlorate Salts -Potassium Perchlorate	7778-74-7	\$25-00 6 22-00	1,4540, 8	
7,08-04	1	•	-Sodium Perchlorate	7601-89-0 375-73-5	1800 0 1200 1800 0 1200 1800 0 1800 1800 0 1800 1200 0 1800		
200-02 600-02	P V	1 01	Permethrin	52645-53-1	3.78+03 8 4.18+04 2.98+03 6 1.08+03		
65 C 8.26-67 C		1 01	Phenacetin	62-44-2 13684-63-4	PRIMARY & TENER A	436-00 c 196-01 1 3-6-01 1 436-03 1	
2,6501 X05-01	90501 C	1 0.1	Phenredipham Phenol	108-95-2	196+04 n 245-05 n 256-02 n 336-03	2.16-02 n 6.00-02 n 5.00-00 n	
4.05-03		1 0.1	Phenol, 2-(1-methylethoxy)-, methylcarbamata	114-26-1 92-84-2	2.5E+02 A 3.5E+03 3.2E+01 B 4.1E+02	7,8500 ± 4,36500 ± 1,05500	
9,08-04 8,08-03	X	1 01	Phenothiazine Phenylenediamine, m-	108-45-2	3.0E+02 n 4.9E+03	17.3	
(2)	-	1 0.1	Phenylanediamine, o-	95-54-5 106-50-3	1.2E+01 6 4.3E+07 1.2E+04 n 1.3E+05 n	Media e	
1.02-01	H	1 0.1	Phenylenediamine, p- Phenylphenol, 2-	106-50-3 90-43-7	28E+02 0 2E+03	m 3,5000 n 2,000 n 3,000 n	
05 H 2,08-04	H	4	Phorate	298-02-2	2.05+03 e 1.25+03 e 1.35+01 n 1.65+02 3.15-01 n 1.05+00	3.15-01 n 1.35-00 n	
article and the second of	305-04 T V	1 1,000	Phospere Phosmet	75-44-5 732-11-6	3.16-01 n 1.36+00 1.56+03 n 1.66+04	3.75402 n	
20502			Phosphates, Inorganic			B \$75-65 H	
###**			-Aluminum metaphosphate -Ammonium polyphosphate	13776-88-0 68333-79-9	3.8E+06 nm 5.7E+07 n 3.6E+08 nm 5.7E+07 n	575-05 1 m 576-05 1	
A.96+01 4.96+01		!	-Calcium pyrophosphate	7790-76-3	3.5E+OS pm 5.7E+O7 n	m 87E-08 #	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		•	-Diammonium phosphate	7783-28-0 7757-93-9	3,66+08 nm 6,76+07 n 3,86+08 nm 8,76+07 n	10 175-00 n 10 175-00 k	
4.85+0 4.85+0			-Dicalcium phosphate -Dimagnesium phosphate	7782-75-4	3 ME+ON PAR 5.7E+07 7 3 ME+ON PAR 5.7E+07 8		
4.92+01	OF BUILDING AND	1	-Dipotassium phosphate	7758-11-4 7558-79-4	3.82+05 nm 5.76+07 n 3.82+08 nm 6.72+07 n	m 9.76405 h	
4.86+01 4.96+01			-Disodium phosphate -Monoaluminum phosphate	13530-50-2	3.85+06 ren 5.75+07 r		
498101	E Professional Confession Confess	1	-Moncammonium phosphate	7722-76-1	3.9E+05 mm 6.7E+07 m	n 6,78406 h 9,75408 h	
A CONT		<u> </u>	Monocatcium phosphate	7758-23-8 7757-86-0	3.86-08 nm 8.78-07 n	106-06 11	
# 500-01 4 300-01 4 300-01	•	•	-Monopotassium phosphate	7778-77-0	3.65+00 mm 5.75+07 m	6.7E+06 1	
		1	-Monosodium phosphatePolyphosphoric acid	7558-80-7 8017-16-1	S.DE+OR non 5.7E+07 (575-05 s 575-05 s	
8.55+01 6.55+01			-Potassium tripolyphosphate	13845-36-8	3.8E+08 nm 5.7E+07 s		
4,98+01 4,98+0		1	-Sodium acid pyrophosphata -Sodium aluminum phosphata (acidic)	7758-16-9 7785-88-8	3.66+09 pm 6.76+07 p 5.66+09 pm 5.76+07 p	168	32 7 7 M
4.94+0: 4:84-0:			-Sodium aluminum phosphate (anhydrous)	10279-59-1	3.8E+08 rm 6.7E+07 t	a 975-00 A	
4,000	•	1	-Sodium aluminum phosphate (tetrahydrate) -Sodium hexametaphosphate	10305-76-7 10124-56-8	3.8E+08 pm 5.7E+07 /		70000 39700
A 300 + G 4 100 + G			Sodium polyphosphate	68915-31-1	3.82+08 nm 5.72+07 r	m 8.76+08 A	
4,95+01		1	-Sodium trimetaphosphate	7785-84-4 7758-29-4	3.65+05 pm 5.75+07 / 3.65+08 pm 6.76+07 /	2 	85003 98000
4.05+0		1	-Sodium tripotyphosphate -Tetrapotassium phosphate	7320-34-5	3.85+09 nm 5.76+07 c	6.7848 A	
4,96+01 4,98+0		i	-Tetrasodium pyrophosphate	7722-88-5	3.8E+08 nm 5.7E+07 1	1091	100
4,000	5 - F		Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate) Tricalcium phosphate	15136-87-5 7758-87-4	3.85+08 nm 5.76+67 r	60 674698 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	
9,500+0 9,600+0	•		-Trimegnesium phosphate	7757-87-1	3.85+08 on \$.75+07	m 17519 1	
4,9E+0		1	Tripotassium phosphate Trisodium phosphate	7778-53-2 7601-54-9	3 M-08 mm 8.78+07 r	9.75-45 1	
3/8/0		4	Phosphine	7803-51-2	235-107 H 2-05-102 2-05-108 pm 2-05-107 H	n 3.16.01 n 1.36400 n 6.0601 n 1	
4.05+0	P 1.08-02 1	1	Phosphoric Acid Phosphorus, White	7664-38-2 7723-14-0	3.0E+00 pm 2.0E+07 (on 126-101 is Autolit in 8,76-08 is	
200-0	· L	•	Phtheletes		Section 12 to 12 t		
42 1 3.4E40 C 3.0E40	e te	¥ 0.4	-Bis (2-ethylhexyl)phthalate	117-81-7 85-68-7	3.86+01 e* 1.86+02 2.86+03 e* 1.06+03	120-00 a 516-00 a 646-00 a' 646- 1 120-00 a	***
-05 P 2,08-01 1,08+01		1 01	-Butyl Benzyl Phthalate -Butylphthalyl Butylghycolate	85-70-1	836+04 B 838+05 B		
1,0640		1 61	-Dibutyl Phthalate	84-74-2 84-66-2	6.9E+00 a 6.9E+04 5.1E+04 n 6.0E+05	1904	
805-01 1,05-01		1 0.1	-Diethyl Phthalate -Dimethylterephthalate	120-61-6	745+00 n 125+06	vn 19543 1	
1,05-0	10 P. C.	1 0.1	-Octyl Phthalate, di-N-	117-84-0		1 20-02 8 m 195-04 A	
100-0		4 0.1	~Phthalic Acid, P- ~Phthalic Anhydride	100-21-0 85-44-9	8.36+06 n 6.26+06 n		
2.02+0 7.08-0) / 2/95-02 C	9 03	Picioram TO 4 C	1918-02-1	136+06 nm 186+06 4 446+06 n 576+64	A 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
1000	. X	1 01	Picramic Acid (2-Amino-4,6-din opt noi)	98-91-3	8.76+00 n 8.26+01 8.76+01 n 7.46+02	ZORAND A	
905-0 105-0	ech C	1 01	Pirimiphos, Methyl	29232-93-7	5.35+02 h 5.25+02	1 136-00 1	
-01 C 848-05 C 7.05-03	r M	i āi	Polybrominated Biphenyls	59536-65-1	12842 4" 7.7842	r 35501 e 14503 e 25549 er	
40 1 10E46 1 10E4		1 0/4	Polychlorinated Biphenyls (PCBs) -Aroclor 1016	12674-11-2	4.16+00 n 2.76+01	148-01 o 618-01 e 828-05 o-	
+00 8 578494 S	Ÿ	1 0.14	-Aroclor 1221	11104-28-2	20501 a 83501	· 4000 · 21500 · 4500 ·	
+00 8 578-04 5 +00 8 678-04 8	¥	1 0.14	Aracior 1232	11141-16-5 53469-21-9	1.76-01 t 7.38-01 2.36-01 e 8.56-01	186 186 186	7776
400 8 078-01 8 400 8 8.76-04 8	V	1 0:14	-Aroclor 1248	12672-29-6	2.0E-01 c 9.5E-01	· 480 · 150 · 780 ·	
HO & 5.75.04 & 2.05.05		1 0.14	-Aroclor 1254	11097-89-1	2.45-01 4 9.78-01	<u> </u>	24000

Toxicity and Chemical-specific Information		SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=	i; m = Concentration may	cition 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5: V = volatile; R = RBA applied (See User Guide for Ar ay acceed ceiling limit (See User Guide); a = Concentration may acceed Creat (See User Guide)
ro la que la aen la sun lt⊻l		Contaminant		Screening Levels Protection of Groun
eday" v tentr" v tentre-day v trains v t	SMAS ARE Create	& Analyte	CAS No.	to tracket the make the tracket the tracket the tracket the tracket the tracket the tracket tr
-00 E 115-03 E 235-06 E 146-05 F V	1 0.14	Heptschlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189) Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	39635-31-9	9 13601 4 526.01 4 296.00 1 146.00
+00 E 1.18-03 E 2.08-05 E 1.38-03 E V	20 0014	Hexachiorobiphenyl, 2.3.3',4.4',5'- (PCB 157)	52663-72-6 69762-90-7	-6 1260 c 5.160 c 2360 c 1360 c 4060 c
-00 E 180 # 1360 E 1360 EV	1 0.14	Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	
-00 E 1.1E 05 E 2.3E 05 E 1.3E 03 E V	1 0.14	Hexachlorobiphenvi. 3.3'.4.4'.5.5'- (PCR 189)	32774-16-6	
	1 0/14 1 0/14	Pentachlorobiphenyl, 2,3,4,4',5- (PCB 123) Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	65510-44-3	~ 1.400 € 6 AMAN
+00 E 1 (E03 E 23E03 E 13E03 E V +00 E 1 (E03 E 23E03 E 13E03 E V +00 E 1 (E03 E 23E03 E 13E03 E V		Pentachiorobioherryl, 2.3.3' 4.4'- (PCR 105)	31508-00-6 32598-14-4	-8 125-01 of 4,00-01 of 2,00-00 o 1,00-02 o 4,00-02 o 4
	5 0.14	Pentschlorobiphenvl, 2.3.4.4'.5- (PCB 114)	74472-37-0	0 12500 r 50500 r 18500 c 14500 c 46500 c
900 1 5 75 64	1 0.54	Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126) Polychlorinated Biphenyls (high risk)	57465-28-8	8 38508 C 19949 C 74507
401 I 1.0EQL I	1 0.14	Polychlorinated Rinhanyis (low risk)	1336-36-3	2.00-01 6 8.4E-01 C 4.0E-02 6 11E-02 6
101 E 305-05 V	1 044	Polychlorinated Biphenyls (lowest risk)	1336-36-3 1336-36-3	THE R LEW A LAW & LEED!
+01 E 1.16-02 E 2.36-08 E 1.36-04 E V	1 016	SI~Tetrachlorobiphenvi. 3.3' 4.4'- (PCR 77)	32598-13-3	
APPORT	1 044	-Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	4 1250 e 1550 e 1500 e 1500 e 1500
		Polymeric Methylene Diphenyl Dissogranate (PMDI) Polymuclear Aromatic Hydrocarbons (PAHs)	9016-87-9	# 252-06 nm 5.82-06 nm 8.82-01 n 2.02-00 n
606-02 I V	4 0.10	-Acenephthene	83-32-9	ANEXON & AMERICA
OI E LIBOUR C TOTAL I V	1 0.13	-Anthracene	120-12-7	
100 C (1E0) C	1 0.13	Benz(s)anthracene Benzo(i)fluoranthene	56-55-3	1.65-705 8 2.55-705 ent
+00 1 (1E-03 C	1 0.13	-Benzo(a)pyrene	205-82-3	4.75-01 a 1.76-00 c 2.85-02 a 1.15-01 a 8-95-02 a
	1 0.13	-Benzo[b]fluoranthene	50-32-8 205-99-2	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CO E LIEGE C M	7. 0.13	-Benzo[k]fluoranthene	207-08-9	1.06-01 a 2.06-00 a 8.26-01 a 1.16-01 a 3.06-02 o 1.06-00 a 2.06-01 a 8.26-00 a 1.16-01 a 3.06-01
43 £ 1.1846 C	1 013	-Chloronaphthalene, Beta-	91-58-7	4.05+05 n sqs-04 n
100 E 12E03 C	1 200	~Oibenz[a,h]anthracene	218-01-9	
21 C 1160 C	1 0.15	-Dibenzo(a,e)pyrene	53-70-3 192-85-4	1.90-02 C 2.90-01 C 2.90-24 A 1.00-00 A 2.90-00 L
40502	1 0.13	-Dimethylbenz(a)anthracene, 7.12-	57-97-6	120 : 150 :
100	1 0.18 1 0.18	Fluoranthene	208-44-0	2.45-03 # 3.02-04 p
Of E 1.1504 C	4 865	Fluorene Indeno[1,2,3-cd]pyrene	86-73-7	245-09 1 348-06 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
on P TOPOLA V	7 0.13 3.06+0	- Methylnaphthalene, 1-	193-39-5 90-12-0	186-00 1 28-00 1 125-01 1 116-01 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
34646 C 20642 30645 V	1 013	-Methylnaphthalene, 2-	91-57-6	
00 C 11E04 C	9 0.13 3 0.18	-Naphthalene -Nitropyrene, 4-	91-20-3	14:00 1 14:00 1 15:00 1 15:00 1 15:00 1 15:00 1
- 18	1 0.13	-Pyrene	57835-92-4	
	4 6.5	Potassium Perfluorobutane Sulfonate	129-00-0 29420-49-3	18-00 1 28-00 1 18-00 1 18-00 1
O1 80E(03)	1 01	Prochloraz	67747-09-5	3.0500 c 18901
18.0	4 64	Profluralin Prometon	26399-36-0	0 476+06 n 7.05+00 n 2.66+04 h
4.08-00 (4 01	Prometryn	1610-18-0	250-00 1 (20-00) 130-00 1
125 (2)	1. 0.1	Propechior	7267-19-6 1918-16-7	
205-02	1 01	Propenil	709-96-8	THE RESERVE OF THE PARTY OF THE
20 00 V	1.15+0	Propargite Propargyl Alcohol	2312-35-8	1,991-00 h 1,981-04 n
	1 01	Propagine	107-19-7 139-40-2	188-10 0 200-10 k A00-10 n
2.9E-02 J	1 01	Propham	139-40-2	1.55+03 n 1.65+04 n 5.65+03 n
1.38.42 1 8.08.45 V	1 61	Propiconazole	60207-90-1	\$28-07 a 1,18-04 h 2,18-02 a
	1 335100	Propionaldehyde Propyl benzene	123-38-6	\$25-07 a 1.75-04 h 2.15-02 a 7.75-02 a 7.75-01 a 1.75-01 a
3.0E400 G.V	1 198-0	Propylene	103-65-1 115-07-1	1.55-00 n 1.25-04 n 2.55-00 n 2.55-00 n 2.55-00 n 1.55-04 n 2.55-00 n 2.55-0
205-01 P 278-04 A	STATE OF THE PARTY OF THE	Propylene Glycol	57-55-6	1344 111 1144
7.05-01 H 2.05-400 I V	1 0.1	Propylene Glycol Dinitrate	6423-43-4	5.8E-05 no 1.8E-05 pm 2.8E-01 n 1.8E-00 s
of 1 3.75-06 1 3.05-02 1 V	1 1	Propylene Glycol Monomethyl Ether Propylene Oxide	107-98-2	438-04 n 378-05 nm 218-05 n 838-05 a 138-06 m
755-02 1	1 01	Propyzamide Th	75-56-9 23950-58-5	276-00 6 376-00 6 776-01 6 576-00 6 276-01 6 476-00 8 476-00 8
105-05 V	5.05+05	Pyridine D— L	110-86-1	
30 i 300-04 i	1 01	Quinalphos	13593-03-8	
9.0E-09 (1 01	Quinoline Quizalofop-ethyl	91-22-5	TARCH & TARCH & TORNEY CO.
3.0E-62 A	1	Refractory Ceramic Fibers	76578-14-8 NA	178-02 1 748-03 1 108-03 h
105-02	7 0.1	Resmethrin	10453-86-8	
6.05-29 H V 406-28 I V	1	Ronnel	299-84-3	
n Cessos C	1 0.1	Rotenone Safrole	83-79-4	2.555-0.0 n 3.05-0.0 n 4.755-0.0 n
BUE OR (•	Selenious Acid	94-59-7 7783-00-8	STRUCK a 106-00 a 1,00-00 a 1,00-01 a 5,000-01
50E-03 1.20E-02 C 50E-03 C.20E-02 C		Selenium	7783-00-8 7782-49-2	SECON D. 1.00-00 D. 1.
50E-03 C 20E-02 C		Selenium Sulfide	7446-34-6	\$50-00 A \$40-00 A \$20-00 A \$40-00 A
3,0643.0	1 01	Sethoxydim Silica (crystatline, respitable)	74051-80-2	5.7E+03 n Z.EE+04 n
5.0E.03 I	.04	Silica (crystalline, respirable) Silver	7631-86-9	A.M-00 cm 1.86-07 cm S.18-00 n 1.86-01 n
I H SIRIN I	1 01	Simazine	7440-22-4 122-34-9	CARNOL II CARNOL II GARROL II
1,05-00 4,06-03 +	1 0.1	Sodium Acifluorien	62476-59-9	458-00 s' 158-01 s 4.00-00 A 58-00 A 58-00
	A STATE OF S	Sodium Azide	26628-22-8	5.1E-02 n 4.7E-03 n

Regional Screening Level (RSL) Summary Table (TR=1E-06, HQ=1) May 2016

rotection of Ground Wate		evels	Screening Le				27): H = HEAST; F = See FAC; J = New Jersey; O = EPA Office of Water; E = see ut 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Con Contaminant		Currout, II - Horiouri	
			1				Contaminant		nical-specific Information	Toxicity and Chen
	and they bear	total bar bala		Control State	inglet let	CAS No.	Analyte	G_	e REC; e o mute-	AUN IN MIC.
	86-01 ¢	2,08.01 n 8,75+01 n 1,05+03	1,42+01 A	0.5E+00 0		148-18-5	odium Diethyldithiocarbamate		VIGNORO IVIII DEL IGUES	<u>y' iyi maayy' iyi (mata-day).</u> H S.OE-02
	0.00 A	184		1999	1.3E+00 n. 7.8E+01 n	7681-49-4 62-74-8	odium Fluoride		A 43600 0 1	5.05-02
		1.65-05		13E+03 h	7,88401 ft 8,38401 ft	13718-26-8 13472-45-2	odium Metavanadate	8	4	205-05 106-03
	A COURSE OF THE STREET, AND ADDRESS OF THE STREE	STATE OF THE PROPERTY OF THE P	3.			10213-10-2	odium Tungstate odium Tungstate Dihydrate			4.00.64
	16.602	2,88-00 4 4,18-00 1,98-00	0.05.05	9.0E+01 0 9.0E+01 0	2.36+01 o* 3.06-01 +	961-11-5 7789-06-2	irofos (Tetrachlorovinphos)	84 S	 	6.06-04 1 1.06-02
	T-101	1/5/9		7.0E+09 H	475+04 n	7440-24-6	rontium Chromate rontium, Stable		C 20204 C M 0028	C 1.5E-01 G 2.0E-02
		n 4.65-00 n 1.26+03	1.05+03 A	3.85+04 #	1.9E+01 h 6.0E+05 hs	57-24-9 100-42-5	rychnine	64 S	! 	9,00-01 3,00-04
	86:00 h	4 66+01 8 8 86+00 8 2 08+01	2 18400	1200	1.9E+02 R	NA	tyrene tyrene-Acrylonitrile (SAN) Trimer	0.72+02	1 108-00 I V	208-01
	15401 n	4 45404	n Ziterus I		6.5E+01 R 6.1E+01 R	126-33-0 80-07-9	uffoliane	0.1 8	P 2/08/09 X 1	3.0E-63 1.0E-03
	16+00 n	. <u>146-00</u> 1 216-00	9 105100 2	10000	1.48+08 nm 1.48+08 nm	7446-11-9	ulfonyfbis(4-chlorobenzene), 1,1'- ulfur Trioxide		10500 G V 1	8.06-04
	AE+00 à	1.75-65 0 1.85-00	e 4.0E-01 c	B2E401 C	2.2E+01 0	7664-93-9 140-57-8	ulfuric Acid ulfurious acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	STREET, STREET	1.05-05 C	
	4 C		1	2年104 578404 7	1,0E+00 n 4,4E+00 n	21564-17-0 34014-18-1	CMTB		#	1 7.18-00 1 6.08-02 3.08-02
	68×62 A	100-02	•	1.0E+04 #	1.実・体 か	34014-18-1 3383-96-8	ebuthluron emephos	40.4	1 1	7.0E-02
	7 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1.00	2	1,1E404 ! 2.9E401	8:26+00 n	5902-51-2 13071-79-9	erbecil	os t	* 1	206-02 1.36-02
	ation o	1.85-01	a	828+62 1	6.3E+01 n	886-50-0	erbufos erbutryfi	3.16+01	H Y 1	2.95-06
	76-00 A T	3.0E+00	<u> </u>	825+01 3.55+02	6.3E+00 n 2.3E+01 n	5436-43-1 95-94-3	etrabromodiphenyl ether, 2,2',4,4'- (BDE-47)	0.1	100	1,000 1,000
	76-01 e	o 1.75400 o 6.76.01	3.0501	8.00-400	2.0E+00 c	630-20-6	etrachlorobenzene, 1,2,4,5- etrachloroethene, 1,1,1,2-		Y 1	3.08-04
	TEAN OF LINES	2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u> </u>	2.7E+00	6.05-01 6 2.46+01 6	79-34-5 127-18-4	etrachioroethane, 1,1,2,2-	1.00(+00)	V 1	1 74506 1 30507 1 58506 0 20502
	et eta n	Letely C. Litera	α	2.0E+04 (136+63 #	58-90-2	etrachioroethylene etrachiorophenol, 2,3,4,6-		1 40E-02 1 V 1	1 2.00-07 6.00-03
	200 0 000000000000000000000000000000000	116.0	<u> </u>	185-01	3.05-00 c 3.25+01 n	5216-25-1 3689-24-5	etrachlorotoluene, p- alpha, alpha, alpha-		. v i	905-02 H
		n 385405 w 17640	pu 8.36+04 i	#1E+02 A	1.05+05 mm	811-97-2	etraethyl Dithiopyrophosphate etrafluoroethane, 1,1,1,2-	0.1	808+01 / V	325.04
			<u> </u>	2.8600 2.8401	188+00 n 188+00 n	479-45-8 1314-32-5	etryl (Trinitrophenylmethylnitramine)		2 1	20640
	1.05.01 n 2.05.400	2.00-01	•	1.28+01	7.86-01 m	10102-45-1	hallic Öxide hallium (I) Nitrate		1	2,00-06 1,05-06
	TOTAL STREET,	2,00.01	-	128401 128401	7年91 - 7	7440-28-0 563-68-8	hallium (Soluble Salts)		•	1,05,08
	(6-0) n	460	n	2.30+01	1,050+00 #	6533-73-9	haltium Acetate hallium Carbonate		* * 1	1,08-06 2,08-05
	(C-0) o	10.0	n R	125-01	746-01 n	7791-12-0 12039-52-0	hallium Chloride TD—1		<u> </u>	1.06-05
			n	2.30+01	1.000+000 B	7446-18-6	haltium Sulfate			1.08-06 2.08-08
	2018 1	1月1	A	1.1E+04 8.5E+63	632-02 n	79277-27-3 28249-77-6	hirhencarb		1 1	1.45-02
	(48+00 6 (38+00 A	1,63+0	1	7.92+04	6.48+03 11	111-48-8 39196-18-4	Thiodiglycol	0/1 9/0075	¥ 1	1.0542
	10 19 19 19 19 19 19 19 19 19 19 19 19 19	SOMETIMES OF THE PROPERTY OF T		ERMA	KIE-US A	23564-05-8	Thiofanox Thiophanate, Methyl	- 81	H	7.007-02 \$08-04
	85-01 1 70-04 1		<u> </u>	4.1E+03	3.00 M	137-26-8 7440-31-5		0.1		8.05-02 5.05-03
			1,0E-01	7.05-05 1.05-05	1.00-10 mm	7550-45-0	Fin Fitanium Tetrachloride		H JORGE AV 1	125-01
		100 0 100	M 53543	4.72+04	4,66,00	108-88-3 584-84-9	Toluene	8,3E+02	1 8.08400 1 V 1	8.08-02
	CEO C		2	2.75+01 1.35401	1.00 1 1.00 1 1.	95-70-5	Foluene-2,4-ditsocyante Foluene-2,5-diamine		BORGE CV 1	1,15-01 G
	175-00 K	n 35500 6 17600	n 82600	2.25+01	5.354(3) #	91-08-7 95-53-4	Foluene-2,6-diisocyante	1,76+08	A BOBOS C V 1	1 X 2.08-04
	(A+0) #	2,5140		7.75401	3.48401 4 1.66401 6	106-49-0	Foluidine, o- (Methylaniline, 2-) Foluidine, p-	0.1 0.1		P 5/8-05 G
	130103	# 2.65+00 n 1.55+0	914 84 5 1840	3.雅·傑 ()	2.38+65 mm	NA NA	Total Petroleum Hydrocurbons (Aliphatic High)	3,48,01		2 P 9.08-03 3.08-00
	100100 11	4 44 W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	es 1.0E+08	1.00-00	5.28+02 /s 9.02+01 /s	NA	Total Petroleum Hydrocarbons (Aliphatic Low) Total Petroleum Hydrocarbons (Aliphatic Medium)	1,41422	X 105-01 PV 1	4.06.00
	350	A 135102 A 33510	0 215001	3.30101 4.25402	2.500+00 n 0.200+01 d	NA NA	Total Petroleum Hydrocarbons (Aromatic High)	0.1	· Programme of the contract of	4.00-02
	735.02 6 505.00		R STEADO	6年-位	0.2E+01 0 1.1E+02 0	NA	Total Petroleum Hydrocarbons (Aromatic Low) Total Petroleum Hydrocarbons (Aromatic Medium)	1 30403	P 30E40 P Y 1	105-00
	7.1E-02 : 5.0E+01 (AP-02 : 5.0E+01		c 6.65-00	0.16400 8.38403	485-01 0 476-02 8	8001-35-2 66841-25-6	Toxaphene	0.1		0 1 32504 1
	3.76-60 A		h	122	4.76+02 n 2.82+01 n	688-73-3	Tralomethrin Tri-n-butyttin	0.1	1	7,8540. 0,0544
	5.00×00 m	8,30+0	net O	8.85407 2.55404	3.16+06 nm	102-76-1 43121-43-3	Triacetin	0.1	. i	806-01
	X WAS 10 AND BROKEN	CONTRACTOR AND ADDRESS OF THE PROPERTY OF THE PARTY OF TH		1.02+04	198+05 n 198+05 n	2303-17-5	Trialiste	0.1		3.08-402
	298400 H	1,000		6.25.408 6.85.400	6.00+02 A 6.10+02 A	82097-50-5 101200-48-0	Triesulfuron	0.1	ks. t	13640
	4.55+01 A	181	n	8,8048	6.1E+02 n 3.8E+02 n	615-54-3	Tribenuron-methyl Tribromobenzene, 1,2,4-	0.1	1	8.08.00
	5.28+00 e* \$05-00 n	8.0E+0		246402 246402	8.05101 c*	126-73-8 NA	Tributyl Phosphate	0.1		5.0643 5 P (.0642
	6.78+00 (I	1764	н	240-02	1,85401 B	56-35-9	Tributyttin Compounds Tributyttin Oxide	01		336-04
		n 1,36+05 n 6,36+0	mms 3.12+04	178-05	4.00±+04 m 7.00±+00 c	76-13-1 76-03-9	Trichloro-1,2,2-trifluoroethane, 1,1,2-	9.15-02	3.08401 H V	3.0E-04 3.0E-01

i i i i i i i i i i i i i i i i i i i	emical-specific Information	California Company	SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on Contaminant				Screening L	evels	(Cee Cael Guide)		Protection of Ground Water
FO e LIR e RIO.	a REC alelman	1	N Commence of the Commence of	1				E (1877)			i lotacia i di Giodila Viale
a-dent' (v.) (unemb) (v.) (mates-de	N V (media) V I gen GAA	58 A88 (170/kg	AnaMe	CAS No	Resident Soll	Industrial Soil	Plantitest Air	Industrial Al	Topuster	NOT 1	
E-05 X 3.0E-05	*	0.1	Trichloroaniline, 2,4,6	634-93-5	1,95+00 4	2.85+01	ter Laurent lie	wi (mbr)	Jane 1 Aug.	and (only	
8.06.04 E-02 P 1.0E.00	X Y 1	VIII (2011) (63)	Trichlorobenzene, 1.2.3-	87-61-6	6.3E+01 n		•		4.08.51		
			Trichlorobenzene, 1,2,4-	120-82-1	2.48+01	11111	215-09		7.05+00	8.1	
2.00+00 E-02 1.40E-05 4.0E-05	1 5.0E+00 I V 1 1 2.0E-04 X V 1		Trichloroethane, 1,1,1-	71-55-6	5.1E+03	3,05-04	5.2E+05	1 225-04	n 1.28400 n 8.08403	1000	
42 1 41E-06 50E-04	2.0E-03 V N 1	2,25+0	Trichloroethane, 1,1,2-	79-00-5	1.18+00 e*	1 05 at 0	180	7.78.07	280	n 200-02 c" 500-00	
306-01			Trichloroethylene	79-01-6	9.46-01	8,02,400	** A.E.C.	100.00			
1.05-01			Trichlorophenol, 2,4,5-	75-69-4	2.3E+04 m	3.82+05 #	171		125400		
E-02 3.1E-06 1.0E-03	F eet and the second	0.1	Trichlorophenol, 2,4,6-	95-95-4	0.3E+05 n	8.28+04	0	H. J	1,35400		
105-02	4 1	0.1	Trichlorophenoxyacetic Acid, 2.4.5-	88-06-2 93-76-5	438-07	2/15/03	9.45.48	200 E C 3	C. LIENS	A 200 (1849)	
\$##.00	1 1	0.5	Trichlorophenoxypropionic acid, -2,4,5	93-76-5 93-72-1	8.35+02 n	8.32.400	9	100	1.00:00	8	
5.0E-03 E+01 (4.0E-03) V 1	1.0240	Trichloropropane, 1,1,2-	598-77-6	3.9E+C2 n	148.00	n.		116	n Gallett	
	1.30E-04 1 V M 1	1.4640	Trichloropropane, 1,2,3-	96-18-4	5.15-00 c	1.18401				9	
3/R-03 2/R-02	X 3 DE O4 P V 1	3.12+02	Trichloropropene, 1,2,3-	96-19-5	7.365-01 n	3.15400	* 3.18-01 ;	1.05+00	1 750	7	
3.05-03		0.f 01	Tricresyl Phosphate (TCP)	1330-78-5	135-03 A	180		144	n 648-01		
	7.05-03 I V 1		Tridiphane	58138-08-2	1 年 位 11	2.55+63	n		1,000+01		
2.06+00		0.1	Triethylamine Triethylene Glycol	121-44-8	1.2%+0P; n.	4.86+02	n 7.22+00 r	3.1E+01	n 100+01	24	
	20E+01 P V 1		Triffuoroethane, 1,1,1-	112-27-6	1.3E+05 nm	1,0246	10		4.02+04	4	
-03 i 7.5%-05			Trifluratio	420-46-2	1.5E+04 ms	0.2E+04	ns 2.18+04 a	8.86+04	9 4.25+04		
-02 P 1.0E-02	P	0.1	Trimethyl Phosphate	1582-09-8	9.05-01 0	4.28+02	ď		2.88+00		
	5.0E-03 P.V. 1	2.02+00	Trimethylbenzene 1 2 3.	512-56-1 526-73-8	2.7€+01 e*	1,18102		100	3.96+(3)		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.0E-03 P V 1	2.25+02	Trimethylbenzene, 1,2,4	95-63-6	4.00±01 n	2.1E+02	4 5.25+00 r	5.3E+01	n 126-01	9.1	
1.0E-02	X	1.02-00	Trimethylbenzene, 1.3.5-	108-67-8	5,65+(r) n 7,85+(t) ns	2.4E+02 1.2E+04	n 7.85+00 r	3.18+01	0 188+01	0	
105.02	X Y 1	3.0E+01	Trimethylpentene, 2,4,4-	25167-70-8	7.8E+02 (8	1.28+04			28400	8	
-02 / 50E-02		9.019	Trinitrobenzene, 1,3,5-	99-35-4	2,3E+03 n	3.25+04			1.521-01	n	
205-02	P 1	0.032	Trinitrotoluene, 2,4,6-	118-96-7	2.1E+01 6**	0.65+01			- 18:38		
2,05-00		0.1	Triphenylphosphine Oxide	791-28-6	1.3E+03 n	1.0E+04			1,65+02		
1.05-02	2	- 2	Tris(1,3-Dichloro-2-propyl) Phosphate Tris(1-chloro-2-propyl) phosphate	13674-87-8	1.3E+03 n	T.8E+04	a .	100	3,000,000	2000	
400 C 6:66-04 C		475-40	Tris(2,3-dibromopropyi)phosphate	13674-84-5	6.364(g n	8.26+65	Ħ	2000 BRIDE	SECTION AND ADDRESS OF THE PARTY OF THE PART		
69 P 7.0E-03		0.1	Tris(2-chloroethyl)phosphate	126-72-7	2.85-Q1 · o	1.99400	: AMEGS :	146400	e 4.25-05	a 1	
03 P 1.0E-01	P 1	0.1	Tris(2-ethylhexyl)phosphate	115-96-8 78-42-2	170+01 c* 170+02 c*	1/6+02			5.00+00		
8:06-04			Tungsten	7440-33-7	6.36+01 n	726-02	•		2.69		
90 C 29E44 C	1 40E-05 A 1	THE PLANE OF STREET	Uranium (Soluble Setts)	NA .	2.35+02	100	40000	W 100 00	1.00-01	5.05401	
	1 70E-06 P 0.00	0.1	Urethane	51-79-6	126-01 6	198.60	19.2	428.02		THE STREET, ST	
	1 7.0E-06 P 0.026 8 1.0E-04 A 0.026		Venedium Pentoxide	1314-62-1	4.85100 0**	2.0E+03		1.55-65	1 1 1 1 1 1 1		
1020	7 7	A CONTRACTOR OF THE CONTRACTOR	Vanadium and Compounds Vernolate	7440-62-2	3.95+02 6	6,62+03	1.0501 n	5.46-01	0 8,0000		
258-02		0.1	Vinciozolin	1929-77-7	7,85401 0				1.1830		
1.0E+Q0	H 2.05-01 J V 1		Vinyl Acetate	50471-44-8 108-05-4	1,00±103 n	2.18+04		40.00	4.46+00	4 1	
32E-08 FF	3.0E-03 T V	2.55103	Vinyt Bromide	108-05-4 593-60-2	150	- 1500	111:8 3	A.H-42	A 415-02		
01 1 4.4E-08 1 3.0E-03	1 1.06-01 1 V M 1		Vinyl Chloride	75-01-4	6.0E-02	1.75+00	1.75 O 0	3.85.04 3.86+00	F 124		
306-04 208-01	1		Warfarin	81-81-2	1.05+01 A	238+02			546-00	1 2b5+00	
2.00.01	5 1.0E-01 8 V 1 6 1.0E-01 8 V 1		Xylene, P-	106-42-3	5.0E+02 ms	2.42409	1 1 0E+02 n	4.48+02	0 13.0		
200-01	5 10E-01 SV 1	400	Kylene, m- Kylene, o-	108-38-3	8:96+02 m	2.45+03 6	a 1.0E+02 a	4.454	n 1.00+10		
2.00	1102811V 1	- 12 H	Aylene, o-	95-47-6	6.5E+00 m	2.86+03 m	1.00+00 n	4.46+02	n 1.95+00		
30E-04	4		Ayrenes Zinc Phosphide	1330-20-7	5.8E+02 ms	2.5E+03 /	TOTAL N	14.0	0 100	18 May 10 10 10	
3.02.01	r.		Zinc and Compounds	1314-84-7	2.3E(0) n	3.85+02			6.05+00	1	
5.0E-02	1	0.1	Zineb	7440-66-6	2.3E+94 n	3.92+95 n			0.05+03		
8.0E-05	\$\$\tau_1\tau_1\tau_2\tau	Swan to division and second	Zirconium	12122-67-7 7440-67-7	5.2E+05 # 6.3E+00 #	A SEADA		SAME OF THE SAME	THE RESERVE OF THE PARTY OF THE	**************************************	

Table 2a Region 4 Sediment Screening Values for Hazardous Waste Sites Non-Narcotic Modes of Action

Chemical	CAS	Freshwate Screenii	Source	
	/6	ESV	RSV	
Metals mg/kg dw				
Nickel	7440-02-0	22.7	48.6	b
/anadium	7440-62-2	50	57	
Bulk Petroleum Hydrocarbons mg/kg dw				<u>'</u>
Gasoline Range Organics		12		m
otal Petroleum Hydrocarbons - Diesel	68334-30-5	340	510	h
Total Petroleum Hydrocarbons - Residual	68476-53-9	3,600	4,400	h

Table 2 Notes:

Red font indicates a bioaccumulative chemical.

indicates protective of aquatic and wildlife receptors.

Shaded gray cells indicate units in $\mu g/kg$ dry weight.

CAS = chemical abstract service registry number

ESV - Ecological Screening Value for Step 2

RSV - Refinement Screening Value for Step 3a

R - Reactive electrophiles/proelectrophiles

N2 - Polar Narcosis

N3 - Diesters

- J Oxidative phosphorylation uncouplers
- H Herbicides
- C Central nervous system seizure agents
- A Acetylcholinesterase inhibitors
- F Fungicide
- E Endocrine disrupters or reproductive and developmental toxicants

Fable 2a Sources:

- a Long, Edward R., and Lee G. Morgan. 1991. The Potential for Biological Effects of Sediment-Sorbed Contaminants Tested n the National Status and Trends Program. NOAA Technical Memorandum NOS OMA 52. Used effects range low (ER-L) for chronic and effects range medium (ER-M) for acute.
- o MacDonald, D.D.; Ingersoll, C.G.; Smorong, D.E.; Lindskoog, R.A.; Sloane, G; and T. Biernacki. 2003. Development and Evaluation of Numerical Sediment Quality Assessment Guidelines for Florida Inland Waters. Florida Department of Environmental Protection, Tallahassee, FL. Development and Evaluation of Numerical Sediment Quality Assessment Suidelines for Florida Inland Waters. Used threshold effect concentration (TEC) for the ESV and probable effect concentration (PFC) for the RSV.
- z MacDonald, D.D. 1994. Approach to the Assessment of Sediment Quality in Florida Coastal Waters. Florida Department of Environmental Protection. 1994 Florida Sediment Quality Assessment Guidelines for Florida Coastal Waters.
- d Region 4 Sediment Model based on highest ranked surface water quality ESV from Table 1a. See Equation 3 in text Section 6.2.2.
- e Region 4 Sediment Model based on: (ECOSAR minimum chronic value). See text.
- f Region 4 Sediment Model based on: (lowest predicted surface water value from McGrath & Di Toro (2009). See text.
- g Persaud, D., R. Jaagumagi and A. Hayton. 1993. Guidelines for the protection and management of aquatic sediment quality in Ontario. Ontario Ministry of the Environment. Queen's Printer of Ontario.
- n Washington State Sediment Management Standards, Cleanup Objectives. http://www.ecy.wa.gov/programs/tcp/smu/sed_standards.htm
- $Los Alamos \ National \ Laboratory \ ECORISK \ Database. \ http://www.lanl.gov/community-environment/environmental-stewardship/protection/eco-risk-assessment.php$
- i CCME (Canadian Council of Ministers of the Environment), 2003. Canadian Environmental Quality Guidelines: Summary Table December 2003. Canadian Council of Ministers of the Environment, Winnipeg, Manitoba. Available at http://www.ccme.ca/publications/cegg_rcge.html
- ς USEPA. 1993. Interim Report on Data and Methods for Assessment of 2,3,7,8 Tetrachlorodibenzo-p-dioxin Risks to Aquatic Life and Associated Wildlife. EPA/600/R-93/055. Available from the National Service Center for Environmental Publications (NSCEP) Document Number 600R93055. http://www.epa.gov/nscep/

Table 2b Region 4 Sediment Screening Values for Hazardous Waste Sites for Narcotic Mode of Action

		Freshwat	er Sediment	
Chemical	CAS	Screening Val	ue (µg/kg 1% OC)	Source
		ESV	RSV	enderscombibility on 2.2000 M Market
	piece :	Section 1994	1	
Monoaromatic Hydrocarbons				
1,2,3-Trimethylbenzene	526-73-8	2,074		С
1.2.4-Trimethylbenzene	95-63-6	92	A 4 2	a, b
1,3,5-Trimethylbenzene	108-67-8	157		a, b
Benzene	71-43-2	113		a, b
Cymene, p- (4-Isopropyltoluene)	99-87-6	179		a, b
Ethylbenzene	100-41-4	272		a, b
sopropylbenzene (Cumene)	98-82-8	33		a, b
Styrene (Vinyl benzene)	100-42-5	116		a, b
Toluene	108-88-3	145		a, b
Kylenes (total)	1330-20-7	103		a, b
Compound (Stora	HE/NE @ 1X OC			
Monoaromatic Hydrocarbons				
			_	<u> </u>
Pentane	- 			
Cyclopentane				
Hexane				
Cyclohexane		-		1
Heptane				
Octane				
sooctane				
Nonane				
Decane		L		<u> </u>
PAHs μg/kg dw	· · · · · · · · · · · · · · · · · · ·			
Low molecular weight PAHs (LMW-PAHs)		·		
1-Methylnaphthalene	90-12-0	*		ļ
2-Methylnaphthalene	91-57-6	*		
Acenaphthene	83-32-9	*		
Acenaphthylene	208-96-8	*		
Anthracene	120-12-7	*		
Fluorene	86-73-7	*		
Naphthalene	91-20-3	*		
Phenanthrene	85-01-8	*		
Total LMW-PAHs		*		<u></u> b
High molecular weight PAHs (HMW-PAHs		*		т
Benz(a)anthracene	56-55-3	*		
Benzo(a)pyrene	50-32-8	*		
Benzo(b)fluoranthene	205-99-2	*		
Benzo(g,h,i)perylene	191-24-2	*		-
Benzo(k)fluoranthene	207-08-9	*		
Chrysene	218-01-9	+ -		
Dibenz(a,h)anthracene	53-70-3	*		
Fluoranthene	206-44-0	*		+
Indeno(1,2,3-cd)pyrene	193-39-5	*		
Phenanthrene	85-01-8	*		
Pyrene	129-00-0	*		d
Total HMW-PAHs				f
Total PAHs	والمراجع المراجع المراجع المراجع المراجع المراجع	1,610		
	nless denoted by shac	197	144	a, b
1,1-Biphenyl	92-52-4 132-64-9	151	680	a, e
Dibenzofuran	91-22-5	2,774	000	c c
Quinoline	109-99-9	1,183		a, b
Tetrahydrofuran	103-33-9	1,103	2012 200 majorio (2012)	a, b

Table 2 Notes:

* see Total below.

Red font indicates a bioaccumulative chemical.

Gray shaded cells indicate concentration in µg/kg dry weight

ESV - Ecological Screening Value for Step 2

RSV - Refinement Screening Value for Step 3a

CAS = chemical abstract service registry number

Table 2a Sources:

1 - Region 4 Sequential Model based on highest ranked surface water quanty ESV from Table 1a See Equation 5 in text Section 6.0.000

2 - Region 4 Sediment Model based on: (ECOSAR minimum chronic value). See text.

Table 2b Region 4 Sediment Screening Values for Hazardous Waste Sites for Narcotic Mode of Action

nerft**dvfoblet@aastrd&b&ti(Towce{2@09**}ic**teel** surface water value from McGrath & Di Toro (2009). See text. Integrand Gerdiner Havio Mides and Soil (Towns (1908)) iched surface water value from McGrath & Di Toro (2009). See text. edilment Ouglity in Florida Coastal Waters. Florida Department of Sediment Quality in Florida Coastal Waters. Florida Department of Coastal Waters. Florida Department of Coastal Waters. Florida Sediment Quality Assessment Guidelines for Florida Coastal Waters. Environmental Protection. 1994. Florida Sediment Quality Assessment Guidelines for Florida Coastal Waters. Campained Coastal Co

Table 1a Region 4 Surface Water Screening Values for Hazardous Waste Sites

Chronic Acute Source	Chemical	CAS	Freshwater	Screening Val	ues (µg/L)
Vickel (filtered) ^ * 7440-02-0 28.9 260 a Vanadium 7440-62-2 27 79 b Monosronatic hydrocarbons L,2,4-Trimethylbenzene 95-63-6 15 140 b 1,3,5-Trimethylbenzene 108-67-8 26 230 b 3enzene 71-43-2 160 700 b Cymene, p- (4-Isopropyltoluene) 99-87-6 16 150 b Ethylbenzene 100-41-4 61 550 b Sopropylbenzene (Cumene) 98-82-8 4.8 43 b Styrene (vinyl benzene) 100-42-5 32 290 b Goluene 108-88-3 62 560 b Kylenes (total) 1330-20-7 27 240 b Ietrahydrofuran 109-99-9 11,000 74,000 b Vilphatic Hydrocarbons 2- 2- 20 1,190 e, i Ieptane 100-2- 230 1,190 e	Chemical	CAS	Chronic	Acute	Source
Vanadium	Vetals				60 C 10 C
Vanadium	Nickel (filtered) ^ *	7440-02-0	28.9	260	a
Venceronatic hydrocarbons 1,2,4-Trimethylbenzene 95-63-6 15 140 b 1,3,5-Trimethylbenzene 108-67-8 26 230 b 3enzene 71-43-2 160 700 b 2,3,5-Trimethylbenzene 160 700 5,3,5-Trimethylbenzene 160 700 700 700 700 700 700	√anadium	7440-62-2	27		
1,2,4-Trimethylbenzene					
1,3,5-Trimethylbenzene 108-67-8 26 230 b	Vionoscometic hydrocerbons	Committee and Committee of the	200	Company of the second	
1,3,5-Trimethylbenzene 108-67-8 26 230 b 3enzene 71-43-2 160 700 b 2ymene, p- (4-Isopropyltoluene) 99-87-6 16 150 b Ethylbenzene 100-41-4 61 550 b sopropylbenzene (Cumene) 98-82-8 4.8 43 b styrene (vinyl benzene) 100-42-5 32 290 b Foliuene 108-88-3 62 560 b Kylenes (total) 1330-20-7 27 240 b Fetrahydrofuran 109-99-9 11,000 74,000 b Aliphatic Hydrocarbons 29-81-81 109-82-7 230 1,190 e, i deptane 20-20-81 24-18-5 49 880 c Polycyclic Aromatic Hydrocarbons (PAHs) 1-91-57-6 4.7 42 b Acenaphthene 91-57-6 4.7 42 b Acenaphthene 83-32-9 15 19 b	1,2,4-Trimethylbenzene	95-63-6	15	140	b
3enzene 71-43-2 160 700 b 5 5 5 5 5 5 5 5 5	1,3,5-Trimethylbenzene	108-67-8	26		
Cymene, p- (4-Isopropyltoluene) 99-87-6 16 150 b Ethylbenzene 100-41-4 61 550 b sopropylbenzene (Cumene) 98-82-8 4.8 43 b Styrene (vinyl benzene) 100-42-5 32 290 b Foluene 108-88-3 62 560 b Kylenes (total) 1330-20-7 27 240 b Fetrahydrofuran 109-99-9 11,000 74,000 b Aliphate Hydrocarbons Pentane 2 20 1,190 e, i I-phane 110-82-7 230 1,190 e, i e I-petane 2 20 1,190 e, i e I-petane 3 3 49 880 c Sooctane 3 3 49 880 c Polycyclic Aromatic Hydrocarbons (PAHs) 3 47 42 b 1-Methylnaphthalene 91-57-6 4.7 42 b	3enzene	71-43-2	160		
Ethylbenzene 100-41-4 61 550 b sopropylbenzene (Cumene) 98-82-8 4.8 43 b Styrene (vinyl benzene) 100-42-5 32 290 b Foluene 108-88-3 62 560 b Kylenes (total) 1330-20-7 27 240 b Fetrahydrofuran 109-99-9 11,000 74,000 b Aliphatic Hydrocarbons 2 2 2 0 b Velopentane 2 2 2 0 0 b 0 0 0 0 b 0	Cymene, p- (4-Isopropyltoluene)	99-87-6	16		
Sopropylbenzene (Cumene) 98-82-8 4.8 43 b Styrene (vinyl benzene) 100-42-5 32 290 b Foluene 108-88-3 62 560 b Stylenes (total) 1330-20-7 27 240 b Fetrahydrofuran 109-99-9 11,000 74,000 b Fetrahydrofuran 109-99-9 11,000 11,000 c Fetrahydrofuran 109-99-9 11,000 74,000 c Fetrahydrofuran 109-99-9 11,000 11,000 c Fetrahydrofuran 109-99-9 11,000 11,000 c	Ethylbenzene	100-41-4			
Styrene (vinyl benzene) 100-42-5 32 290 b Foluene 108-88-3 62 560 b Kylenes (total) 1330-20-7 27 240 b Fetrahydrofuran 109-99-9 11,000 74,000 b Wiphatic Hydrocarbors	sopropylbenzene (Cumene)	98-82-8			+
Tolluene 108-88-3 62 560 b	Styrene (vinyl benzene)	100-42-5	32		
Kylenes (total) 1330-20-7 27 240 b Tetrahydrofuran 109-99-9 11,000 74,000 b Aliphatic Hydrocarbons Pentane 2yclopentane 2yclope	Foluene	108-88-3			
Tetrahydrofuran 109-99-9 11,000 74,000 b	(ylenes (total)		27		
Allphable Hydrocarbons Pentane Cyclopentane	Tetrahydrofuran	109-99-9			
Pentane Cyclopentane dexane 110-82-7 230 1,190 e, i deptane 110-82-7 230 1,190 e, i deptane 20-ctane 30-ctane				,500	
Pentane Cyclopentane dexane 110-82-7 230 1,190 e, i deptane 110-82-7 230 1,190 e, i deptane 20-ctane 30-ctane	Allphatic Hydrocarbons	141.114.114.11		Contract of the Contract of th	
dexane					
Cyclohexane	Cyclopentane				
Depart D	Hexane				
Heptane	Cyclohexane	110-82-7	230	1 190	e i
Sooctane Sooctane	Heptane				
Nonane Decane 124-18-5 49 880 C	Octane			-	
Decane 124-18-5 49 880 c Polycyclic Aromatic Hydrocarbons (PAts) 90-12-0 6.1 109 b 1-Methylnaphthalene 91-57-6 4.7 42 b Acenaphthene 83-32-9 15 19 b	sooctane				
Polycyclic Aromatic Hydrocarbons (PAHs) 49 880 C 1-Methylnaphthalene 90-12-0 6.1 109 b 2-Methylnaphthalene 91-57-6 4.7 42 b Acenaphthene 83-32-9 15 19 b	Vonane				
Polycyclic Aromatic Hydrocarbons (PAts) 1-Methylnaphthalene 90-12-0 6.1 109 b	Decane	124-18-5	49	880	_
1-Methylnaphthalene 90-12-0 6.1 109 b 2-Methylnaphthalene 91-57-6 4.7 42 b Acenaphthene 83-32-9 15 19 b	Polycyclic Aromatic Hydrocarbons (PAHs	1		NAMES OF THE PARTY OF THE PARTY.	GP 0 / 000 11 E 0 10 0 00 00 00 00 00 00 00 00 00 00 00
2-Methylnaphthalene 91-57-6 4.7 42 b Acenaphthene 83-32-9 15 19 b	1-Methylnaphthalene		6.1		1
Acenaphthene 83-32-9 15 19 b	2-Methylnaphthalene	91-57-6			<u> </u>
Accordate to	Acenaphthene				<u> </u>
	Acenaphthylene	208-96-8	13	120	b

Table 1a Region 4 Surface Water Screening Values for Hazardous Waste Sites

Anthracene	Anthracene	120-12-7	0.02	0.18	b
3enz(a)anthracene	Benz(a)anthracene	56-55-3	4.7	42	b
Benzo(a)pyrene	Benzo(a)pyrene	50-32-8	0.060	0.54	b
Benzo(b)fluoranthene	Benzo(b)fluoranthene	205-99-2	2.6	23	b
	Benzo(g,h,i)perylene	191-24-2	0.44	0.91	q
3enzo(g,h,i)perylene	Benzo(k)fluoranthene	207-08-9	0.64	1.3	q
Benzo(k)fluoranthene	Chrysene	218-01-9	4.7	42	b
Chrysene	Dibenz(a,h)anthracene	53-70-3	0.28	0.59	q
Dibenz(a,h)anthracene	Fluoranthene	206-44-0	0.8	3.7	b
Fluoranthene	Fluorene	86-73-7	19	110	b
Fluorene	Indeno(1,2,3-cd)pyrene	193-39-5	0.28	0.6	q
ndeno(1,2,3-cd)pyrene		91-20-3	21	170	b
Naphthalene	Naphthalene	85-01-8	2.3	31	b
Phenanthrene Phenanthrene	Phenanthrene	129-00-0	4.6	42	b
Pyrene	Pyrene	129-00-0	4.0	42	
	Other SVOCs	02.52.4		26	b
1,1-Biphenyl	1,1-Biphenyl	92-52-4	6.5		<u> </u>
Dibenzofuran	Dibenzofuran	132-64-9	4	36	D
Bulk Petroleum Hydrocarbons, µg/L	Bulk Petroleum Hydrocarbons, ug/L				
Gasoline Range Organics	Gasoline Range Organics		114		ļ
Fotal Petroleum Hydrocarbons - Diesel	Total Petroleum Hydrocarbons - Diesel	68334-30-5		<u></u>	
Fotal Petroleum Hydrocarbons - Residual	Total Petroleum Hydrocarbons - Residual	68476-53-9			

Table 1a Notes:

Table 1a Notes:

/alue for total metals in surface water to a screening scaleering diabate/for thetals and surface invatoriaCE/IC (dissolved) F-The freshwater screening value is hardness dependent disactions in the freshwater screening value is hardness dependent disactions in the freshwater screening value is hardness dependent disactions. metals assuming a hardness of 50 mg/L as CaCO₃. A cog/ectioofclCO₃ ite exprecition af control of the contro

isted in Tables 1b and 1c. If hardness data are unavailable essentials barrado be estimated listed in ZT497es Cb (mg/L) + #- Freshwater criteria for pentachlorophenol are pH penedent. Values displayed are for a pH of 7.8.

^ - Criteria for ammonia are pH, temperature, and lifestagedependentmonia are pH, temperature, and lifestage dependent.

** - Selenium concentrations in water do not reflect dietase lemiuroes on caputation in caputation in caputation in caputation in caputation

Table 1a Sources:

 Table 1a Sources:

 3 - National Recommended water Quality Criteria
 a - National Recommended water Quality Criteria http://water.epa.gov/scitech/swguidance/standards http://water.epa.gov/scitech/swguidance/standards ar - Per the NRWQC, when comparing the maximum detected value, the higher number should be used; but if comparing to an average or 95%UCL, the lower numbertsihoold that ingets an average or 95%UCL, the

Table 1a Region 4 Surface Water Screening Values for Hazardous Waste Sites

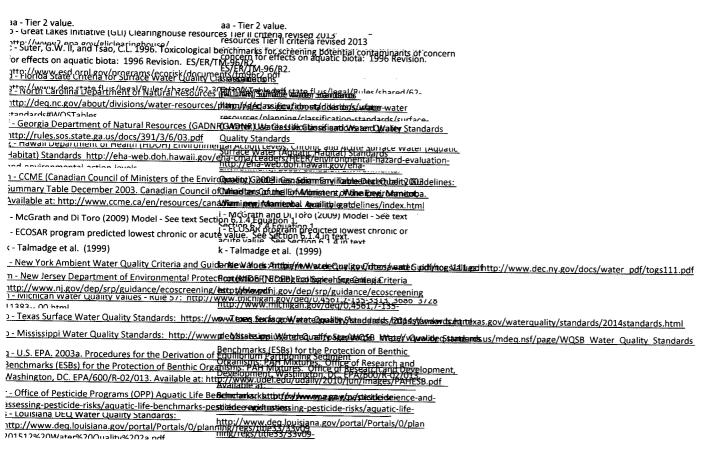


Table 1a Region 4 Surface Water Screening Values for Hazardous Waste Sites

itely protective.

Chemical	Chronic Values			Acute values			Conversion Factors	
Chemical	mc	b _c	CF	m _A	b _A	CF	CF - Chronic	CF - Acute
Nickel	0.846	0.0584	0.997	0.846	2.255	0.998	0.99	0.99

Notes:

* - Saltwater values do not have a hardness correction

^ - Hardness-based Great Lakes Tier 2 equation

CF - Conversion Factor InH - natural log of Hardness Filtered Chronic Screening Value = exp{mC[ln(H)]+bC} [CF] Filtered Acute Screening Value = exp{mA[ln(H)]+bA} [CF]

Nickel			CHEMICAL	
16.1	25			ŝ
29	50	Hardness (mg/kg CaCO ₃)	Chronic Values (µg/L)	
52	100	g/kg CaCO ₃)	lues (µg/L)	Freshwa
94	200			ater Total (L
145	25			Freshwater Total (Unfiltered) Samples
261	50	Hardness (mg/kg CaCO	Acute Val	Samples
469	100	ng/kg CaCO ₃)	Acute Values (μg/L)	
843	200			
8.3	- No Hardiness correction	No bandana	Chronic	Saltwater Unfiltered
75	s correction		Acute	Unfiltered

Notes:

CaCO₃ - calcium carbonate
µg/L - micrograms per liter
mg/kg- milligrams per kilogram

To:

gwen.keenan@fema.dhs.gov[gwen.keenan@fema.dhs.gov]

Cc:

Moore, Tony[moore.tony@epa.gov]

From: Harper, Greg

Sent:

Sat 9/17/2016 12:10:05 AM

Subject: Pelham pipeline SITREPS #1-7
Pelham Pipeline Spill SITREP 1 final 05

Pelham Pipeline Spill SITREP 1 final 09102016.pdf
Pelham Pipeline Spill SITREP 2 final 09112016.pdf
Pelham Pipeline Spill SITREP 3 09122016.pdf
Pelham Pipeline Spill SITREP 4 09132016.pdf
Pelham Pipeline Spill SITREP 5 09142016.pdf
Pelham Pipeline Spill SITREP 6 09152016.pdf

Pelham Pipeline Spill SITREP 7 09162016.pdf

Ms. Keenan,

Please find the attached SITREPS #1-7 for the Pelham Pipeline Spill.

Thank you,

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

To:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Mon 9/19/2016 12:23:48 AM

Subject: Pelham Pipeline Spill conference call

Tony,

Kevin would like to have a 2 eastern / 1 central time call tomorrow. To include you, Jim, Larry and anyone who you need to invite.

Will you set up that call again?

Thank you,

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

To: McGuire, Jim[McGuire.Jim@epa.gov]; Bates, Lloyd[Bates.Lloyd@epa.gov];

R4DutyOSC[R4DutyOSC@epa.gov]; Moore, Tony[moore.tony@epa.gov]

From: Masterson, Chris

Sent: Fri 9/16/2016 12:27:00 PM

Subject: FW: E16444 - Update CANAPS Project

From: AutoResponseCANAPS@uscg.mil

Sent: Friday, September 16, 2016 8:26:55 AM (UTC-05:00) Eastern Time (US & Canada)

To: Berry, Chuck; Harper, Greg; Masterson, Chris **Subject:** E16444 - Update CANAPS Project

CANAPS has processed a CEILING UPDATE REQUEST. Below is all of the information entered by the user or calculated by CANAPS. This Email serves as a confirmation that the request has been processed. An official Coast Guard Messaging System (CGMS) message will be automatically generated.

Recipients are reminded that the issuance of this project number and ceiling does not in any way change the authorizations or restrictions in the instructions/guidance for emergency acquisition procedures.

If you need to contact someone after business hours (Eastern Time), call the NPFC Case Management Duty Officer (CDO) at (202) 494-9118.

CANAPS Tansactor Type:	CELLINGUIPDATE
Project Number:	E16444
Ceiling Undate Date	16 SEP 2016.
Incident Date:	09 SEP 2016.
Incident Name:	PELHAM PIPELINE SPILL - E16444
Previous CG Cost Ceiling:	No Data Entered
Previous OSLTP/CERCLA Ceiling:	\$50,000.00
Previous Total Ceiling:	\$50,000.00
CG Cost Amount Requested:	No Data Entered
OSLTF/CERCLA Amount	\$100,000.00
Requested:	
Total Amount Requested:	\$100,000.00

No Data Entered Approved CG Cost Ceiling: sarde eine en Approved OSTLERCERC A **Approved Total Ceiling:** \$100,000.00 No Dela Entered CCCOS Obligations/Establishment OSLTF/CERCLA \$21,183.80 Obligations/Expenditures: Total Obligations/Expenditus **521,783,80**° **PELHAM Incident Location:** Inciden State: **EPA Region 4 FOSC Unit: PUCIFICISC Name** CHARLES GERRY POC/FOSC Email: BERRY.CHUCK@EPA.GOV (augustigessettä) (ECCC)/ECCLEDISTROINE No Data Entered POC/FOSC FAX: EPA Region 4 Requesting Brit::// DEREK HARDY Requestor Name: Requestur Phone: 70000795407/5 E BERRY.CHUCK@EPA.GOV,HARPER.GREC Requestor Email Address(es): GGMS Reference: Mr. Miguel Bella Case Officer Name: (703)872-6369 · Case Officer (Phone):

(202)360-6061

Miguel.L.Bella@uscg.mil

Case Officer Cell Phone:

Case Officer FAX:

Case Officer Email:

To: McGuire, Jim[McGuire.Jim@epa.gov]; Bates, Lloyd[Bates.Lloyd@epa.gov];

R4DutyOSC[R4DutyOSC@epa.gov]; Moore, Tony[moore.tony@epa.gov]

From: Masterson, Chris

Sent: Thur 9/15/2016 2:27:54 PM

Subject: FW: E16444 - Update CANAPS Project

From: AutoResponseCANAPS@uscg.mil

Sent: Thursday, September 15, 2016 10:27:49 AM (UTC-05:00) Eastern Time (US & Canada)

To: Berry, Chuck; Harper, Greg; Masterson, Chris **Subject:** E16444 - Update CANAPS Project

CANAPS has processed a CEILING UPDATE REQUEST. However, the amount requested exceeds the current maximum threshold. The maximum amount has been approved. Please contact the NPFC Case Officer identified below during normal business hours (Eastern Time) to discuss the need for additional funds.

If you need to contact someone after business hours (Eastern Time), call the NPFC Case Management Duty Officer (CDO) at (202) 494-9118.

Below is all of the information entered by the requestor or calculated by CANAPS. This Email serves as confirmation that the request has been processed. An official Coast Guard Messaging System (CGMS) message will be automatically generated.

Recipients are reminded that the issuance of this project number and ceiling does not in any way change the authorizations or restrictions in the instructions/guidance for emergency acquisition procedures.

CANAPS Transaction Type:	CEILING UPDATE (ABOVE THRESHOLD)
Project Number:	E16444
Celling Wodate Date	15 SEP 2016.
Incident Date:	09 SEP 2016.
incident Name:	PELHAM PIPELINE SPILL - 216444
Previous CG Cost Ceiling:	No Data Entered
Previous COLTF/CERCLA	845,000.00°

Ceiling:	State was a state of the same state of
Previous Total Ceiling:	\$45,000.00
CG Cost Amount Requested:	No Data Entered
OSLTF/CERCLA Amount	\$100,000.00
Requested:	
Total Amount Requested:	\$100,000.00
Approved CG Cost Ceiling:	No Data Entered
Approved OSTLE/CERCLA Celling:	350,000,000 350,000,000
Approved Total Ceiling:	\$50,000.00
CG-Cost	No Data Entered
Obligations/Expenditures:	
OSLTF/CERCLA	\$21,183.80
Obligations/Expenditures:	
Total Obligations/Expenditures:	\$21,183.80
Incident Location:	PELHAM
Incident State.	AL EDA Design 4
FOSC Unit:	EPA Region 4 CHARLES BERRY
POC/FOSC Name:	BERRY.CHUCK@EPA.GOV
POC/FOSC Email:	(404)562-8278
POCIFOSC Phone:	No Data Entered
POC/FOSC FAX:	EPA Region 4
Requesting Unit.	GREG HARPER
Requestor Name:	(404)562-8322
Requestor Phone.	BERRY.CHUCK@EPA.GOV,HARPER.GRE
Requestor Email Address(es):	BERRY CHOCKWEL A. 3004, HART ER. 3012
CGMS Reference:	Mr. Miguel Rella
Case Officer Name:	Mr. Miguel Bella
Case Officer Phone:	(703)872-6069 (202)360-6061
Case Officer Cell Phone:	No Data Entered
Case Officer FAX	Miguel.L.Bella@uscg.mil
Case Officer Email:	Milguet. E. Delia(Wuseg. itti

To:

Buerki, Karen[Buerki.Karen@epa.gov]; Walden, Ted[Walden.Ted@epa.gov]

Cc:

Moore, Tony[moore.tony@epa.gov]

From: Me

McGuire, Jim

Sent: Wed 9/14/2016 1:15:29 PM

Subject: FW: ERNS REPORT FOR 0800 09/13/2016 TO 0800 09/14/2016

Karen... make sure you coordinate SPCC inspection with Ted prior to conducting it.

Thanks

Jim

From: Harper, Greg

Sent: Wednesday, September 14, 2016 9:12 AM **To:** Harper, Greg Harper.geg@epa.gov

Subject: ERNS REPORT FOR 0800 09/13/2016 TO 0800 09/14/2016

ERNS REPORT FOR 0800 09/013/2016 TO 0800 09/14/2016

NRC 1158584, Pelham Pipeline Spill, Pelham, Shelby County, Alabama

Situation Reports (SITREPS) #1, #2, #3 and #4 were previously delivered to the ERNS mailing list. SITREPS will continue to be delivered to the ERNS mailing list by 1800 CDT daily. See https://www.epaosc.org/pelhamgasolinespill for the current SITREPS and for additional information.

NRC 1158880, Country Home Bakers Spill, Atlanta, Fulton County, Georgia

The spill of soy bean oil occurred on September 12, 2016. On September 13, 2016 the spill was reported to the National Response Center. EPA Phone Duty spoke with Georgia Environmental Protection Division (GAEPD) and the reporting party, the spill was estimated to be 2,000 gallons of soy bean oil. The 6,100 gallon tank had no secondary containment and the soy bean oil flowed into the storm water drain. The reporting party was unsure if the soy bean oil had reached the nearest surface water body. After the GAEPD and OSC arrived on site, the estimated spill volume was reduced 200 gallons and the soy bean oil was determined to be contained in the storm water drain. A cleanup contractor was on site to remove the oil, GAEPD will oversee the clean-up. EPA OSC Buerki demobilized from site and will return to conduct a Spill Prevention, Control and Countermeasures (SPCC) inspection. Contact OSC Karen Buerki for additional information.

State	Oil	Haz	Rad	Other		
AL	1	1	0	0		
FL	3	2	0	0		
GA	4	1	0	1		
KY	1	0	0	0		
MS	0	0	0	0		
NC	0	1	0	0		
SC	1	0	0	0		
TN	3	1	0	0		
Total	13	6	0	1	=	20

Response Personnel Status

Duty Officer: OSC Greg

Harper

R1: OSC Chuck Out

Berry

R2: OSC Karen Out

Buerki

R3: OSC Jason Available

Booth

Jackson, TN: Available

OSC Steve

Spurlin

Louisville, KY: OSC Art Unavailable

Smith

Mobile, AL: OSC Unavailable

Leo Francendese

Raleigh, NC: OSC Ken Available

Rhame

Tallahassee, OSC Chris Available

FL: Russell

National Response Center: 1-800-424-8802 Phone Duty E-Mail: <u>R4DUTYOSC@EPA.GOV</u>

Phone Duty MOBILE #: 404-242-3393

To:

Webster, James [Webster.James@epa.gov]

Cc:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Tue 9/13/2016 3:45:22 PM

Subject: RE: ERNS REPORT FOR 0800 09/12/2016 TO 0800 09/13/2016

Working to get his contact information.

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response Removal and Preparedness Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Webster, James

Sent: Tuesday, September 13, 2016 11:01 AM To: Harper, Greg < Harper. Greg@epa.gov> Cc: Moore, Tony <moore.tony@epa.gov>

Subject: Re: ERNS REPORT FOR 0800 09/12/2016 TO 0800 09/13/2016

Please. Copy Michael Sams (USCG D8) on ERNS and sitreps involving the oil spill chuck is working. Reason being, GST is in D8

Sent from my iPhone

On Sep 13, 2016, at 8:53 AM, Harper, Greg < Harper. Greg@epa.gov > wrote:

ERNS REPORT FOR 0800 09/012/2016 TO 0800 09/13/2016

NRC 1158584, Pelham Pipeline Spill, Pelham, Shelby County, Alabama

Situation Reports (SITREPS) #1, #2 and #3 were previously delivered to the ERNS mailing list. SITREPS will continue to be delivered to the ERNS mailing list by 1800 EDT daily. See https://www.epaosc.org/pelhamgasolinespill for the current SITREPS and for additional information.

State	Oil	Haz	Rad	Other	
AL	2	0	0	1	
FL	3	1	0	0	
GA	0	1	0	0	
KY	0	0	0	0	
MS	0	1	0	0	
NC	2	0	0	0	
SC	1	0	0	0	
TN	1	0	0	0	
Total	9	3	0	1	= 13

Response Personnel Status

Duty Officer:

OSC Greg

Harper

R1:

OSC Chuck Out

Berry

R2:

OSC Karen

Buerki

Jackson, TN:

In

OSC Steve Spurlin

Louisville, KY: OSC Art

Available

Unavailable

Smith

Mobile, AL:

Unavailable OSC

Leo Francendese

Raleigh, NC:

OSC Ken

Available

Rhame

Tallahassee,

OSC Chris

Available

FL:

Russell

National Response Center: 1-800-424-8802 Phone Duty E-Mail: R4DUTYOSC@EPA.GOV

Phone Duty MOBILE #: 404-242-3393

To: Cc:

Harper, Greg[Harper.Greg@epa.gov] Moore, Tony[moore.tony@epa.gov]

From:

McCullough, Rachel

Sent:

Tue 9/13/2016 3:11:03 PM

Subject: RE: ERNS REPORT FOR 0800 09/12/2016 TO 0800 09/13/2016

Could you add the CICs and Serdar to the ERNS distribution list?

They are Kyle Bryant, Abena Ajanaku, Ronald Tolliver, L'Tonya Spencer, and Stephanie Y. Brown. Also, please add Serdar Ertep. This will assist us in responding to ERs more quickly.

Thank you,

Rachel C. McCullough, Chief

Investigation & Community Engagement Section

Enforcement & Community Engagement Branch

Superfund Division, U.S. EPA Region 4

mccullough.rachel@epa.gov

(404) 562-8549 office

(404) 955-4470 cell

Follow Region 4 on Twitter: www.twitter.com/EPASoutheast

and Facebook: www.facebook.com/eparegion4

From: Harper, Greg

Sent: Tuesday, September 13, 2016 8:54 AM Cc: Harper, Greg < Harper. Greg@epa.gov>

Subject: ERNS REPORT FOR 0800 09/12/2016 TO 0800 09/13/2016

ERNS REPORT FOR 0800 09/012/2016 TO 0800 09/13/2016

NRC 1158584, Pelham Pipeline Spill, Pelham, Shelby County, Alabama

Situation Reports (SITREPS) #1, #2 and #3 were previously delivered to the ERNS mailing list. SITREPS will continue to be delivered to the ERNS mailing list by 1800 EDT daily. See https://www.epaosc.org/pelhamgasolinespill for the current SITREPS and for additional information.

State	Oil	Haz	Rad	Other	
AL	2	0	0	1	
FL	3	1	0	0	
GA	0	1	0	0	
KY	0	0	0	0	
MS	0	1	0	0	
NC	2	0	0	0	
SC	1	0	0	0	
TN	l	0	0	0	
Total	9	3	0	1	= 13

Response Personnel Status

Duty Officer:

OSC Greg Harper

R1:

OSC Chuck

Berry

R2:

OSC Karen

Jackson, TN:

Buerki

OSC Steve

Spurlin

Louisville, KY: OSC Art

Unavailable

Available

Smith OSC

Mobile, AL:

Unavailable

Leo Francendese

Raleigh, NC:

OSC Ken

Available

Out

In

Rhame

Tallahassee,

OSC Chris

Available

FL:

Russell

National Response Center: 1-800-424-8802 Phone Duty E-Mail: R4DUTYOSC@EPA.GOV

Phone Duty MOBILE #: 404-242-3393

To: McGuire, Jim[McGuire.Jim@epa.gov]; Bates, Lloyd[Bates.Lloyd@epa.gov];

R4DutyOSC[R4DutyOSC@epa.gov]; Moore, Tony[moore.tony@epa.gov]

From: Masterson, Chris

Sent: Sun 9/11/2016 3:02:49 PM

Subject: FW: E16444 - Update CANAPS Project

From: AutoResponseCANAPS@uscq.mil

Sent: Sunday, September 11, 2016 11:02:43 AM (UTC-05:00) Eastern Time (US & Canada)

To: Masterson, Chris; BATES.LLOYD@EAP.GOV; McGuire, Jim; Moore, Tony

Subject: E16444 - Update CANAPS Project

CANAPS has processed a CEILING UPDATE REQUEST. Below is all of the information entered by the user or calculated by CANAPS. This Email serves as a confirmation that the request has been processed. An official Coast Guard Messaging System (CGMS) message will be automatically generated.

Recipients are reminded that the issuance of this project number and ceiling does not in any way change the authorizations or restrictions in the instructions/guidance for emergency acquisition procedures.

If you need to contact someone after business hours (Eastern Time), call the NPFC Case Management Duty Officer (CDO) at (202) 494-9118.

CANAPS Transaction Type:	CEILING UPDATE
Project Number:	E16444
Ceiling Update Date:	11 GEP 2016
Incident Date:	09 SEP 2016.
Incident Name:	RELHAM PIPELINE SPILL-E16444
Previous CG Cost Ceiling:	No Data Entered
Previous OSUTF/CERCLA Celling	.\$10,000.00°
Previous Total Ceiling:	\$10,000.00
CG Cost Amount Requested	No Data Entereit
OSLTF/CERCLA Amount	\$45,000.00
Requested:	
Total Amount Requested	\$45,000,00

Approved CG Cost Ceiling: No Data Entered

Approved OSTLE/CERCLA \$45,990.00
Ceiling:

Approved Total Ceiling: \$45,000.00

CG Cost No Data Entered

Obligational operatures:

OSLITE/CERCLA \$0.00

OSLTF/CERCLA \$0.00
Obligations/Expenditures:

Total \$0.00 Obligations/Expenditures

Incident Location: PELHAM

Incident State: AL

FOSC Unit: EPA Region 4

POCYFOSC Name: CHARLES BERRY

POC/FOSC Email: No Data Entered

POC/FOSC Phone: (404)562-8278

POC/FOSC FAX: No Data Entered

Requesting Unit: EPA Region 4

Requestor Name: KEVIN EICHINGER

Requestor Name: KEVIN EICHINGER
Requestor Phone: (678)897-3759

Requestor Email Address(es): MASTERSON.CHRISTOPHER@EPA.GOV,B,

CGMS Reference:

Case Officer Name: Mr. Miguel Bella

Case Officer Phone: (703)872-6069

Case Officer Cell Phone: (202)360-6061

Case Officer FAX: No Data Entered

Case Officer Email: Miguel.L.Bella@uscg.mil

To: Masterson, Chris[Masterson.Christopher@epa.gov];

BATES.LLOYD@EAP.GOV[BATES.LLOYD@EAP.GOV]; McGuire, Jim[McGuire.Jim@epa.gov]; Moore,

Tony[moore.tony@epa.gov]

From: AutoResponseCANAPS@uscg.mil Sent: Sun 9/11/2016 3:02:43 PM

Subject: E16444 - Update CANAPS Project

CANAPS has processed a CEILING UPDATE REQUEST. Below is all of the information entered by the user or calculated by CANAPS. This Email serves as a confirmation that the request has been processed. An official Coast Guard Messaging System (CGMS) message will be automatically generated.

Recipients are reminded that the issuance of this project number and ceiling does not in any way change the authorizations or restrictions in the instructions/guidance for emergency acquisition procedures.

If you need to contact someone after business hours (Eastern Time), call the NPFC Case Management Duty Officer (CDO) at (202) 494-9118.

CANAPS Transaction Type	CEILING UPDATE
Project Number:	E16444
Celling Update Date:	11 SEP 2016.
Incident Date:	09 SEP 2016.
Incident/Name:	PELHAM PIPELINE SPILL - E16444
Previous CG Cost Ceiling:	No Data Entered
Previous OSLTF/CERCLA Ceiling:	*\$10,000.00 *******************************
Previous Total Ceiling:	\$10,000.00
CG Cost Amount Requested:	No Data Entered
OSLTF/CERCLA Amount	\$45,000.00
Requested:	
Total Amount Requested:	\$45,000,00
Approved CG Cost Ceiling:	No Data Entered
Approved OSTLE/CERCLA Celling:	\$45,000.00 PM
Approved Total Ceiling:	\$45,000.00
CG Cest Obligations/Expenditures	No Data Entered
,	

OSLTF/CERCLA

\$0.00

Obligations/Expenditures:

To the

\$0.00

Obtigations/Expenditusion:

PELHAM

Indicient State:

1.1

FOSC Unit:

EPA Region 4

POC/FOSC:Name:

OHARIES BEHRY

POC/FOSC Email:

No Data Entered

POSFOSC Phones

4845552-5278

POC/FOSC FAX:

No Data Entered

Requesting Unit:

EFA Region 4

Requestor Name:

KEVIN EICHINGER

Requestor Phone:

(673)(997)(276)

Requestor Email Address(es):

MASTERSON.CHRISTOPHER@EPA.GOV,B,

CGMS Reference:

Case Officer Name:

Mr. Miguel Bella

Gase Officer Phone:

(Taraberesalace)

Case Officer Cell Phone:

(202)360-6061

Case Officer FAX:

a formate a fermi

Case Officer Email:

Miguel.L.Bella@uscg.mil

To:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Mon 9/19/2016 12:01:28 AM

Subject: RE: SITREP 9

thanks

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street: S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Moore, Tony

Sent: Sunday, September 18, 2016 8:01 PM To: Harper, Greg < Harper. Greg@epa.gov>

Subject: Re: SITREP 9

No changes -

Sent from my iPhone

On Sep 18, 2016, at 7:55 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Any changes? If so I will use your text.

Sent from my iPhone

On Sep 18, 2016, at 7:50 PM, Moore, Tony < moore.tony@epa.gov > wrote:

Check it and send it on

Sent from my iPhone

On Sep 18, 2016, at 7:20 PM, Eichinger, Kevin < <u>Eichinger.Kevin@epa.gov</u>> wrote:

<image002.jpg>

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #9

1800 CDT, September 18, 2016

INCIDENT SUMMARY

On September 9, 2016, at 1359 hours CDT, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" below ground pipeline to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River).

CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8,000 bbls (252,000 gallons – 336,000 gallons).

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified

Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama.

INCIDENT MANAGEMENT AND STAFFING

OSC Kevin Eichinger remains integrated into Unified Command.

OSCs, the United States Coast Guard (USCG) Gulf Strike Team (GST) and the Superfund Technical Assessment and Response Team (START) are embed in the Operations Sections.

START is embedded in the Environmental Unit.

EPA Public Affairs Specialist and a Public Information Officer are also assigned to the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

Total number of response Personnel: 743

CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate – 6,000 bbl to 8,000 bbls

Recovery/Loss to the Environment Volumes:

Total Volume to Date Volume Since Last SITREP Fuel/Waste Recovery 85,976 gallons* Recovered from Pond #2 To be reported* 257,375 gallons Loss to the Environment due 28,335 gallons to Evaporation **TBD TBD** Bond in the Soil 242,155 gallons* Petroleum Contact Water 40 tons Petroleum Contaminated Soil

Notes:

* Product recovery activities did occur this operational period. Crews were unable to provide product recovery number before the 1600 meeting.

CURRENT OPERATIONS

1) Product Recovery and Removal

• OSC Eichinger participated in an overflight and assessed the Cahaba River and site operations. No sheen was observed on the Cahaba.
• Crews continues to evaluate plugging the culvert between Pond 2 and Pond 3. OSC Garrard oversaw and provided support as they sent a camera in the area to determine the best method to seal it; however, the camera was unable to find the culvert. Unified Command will explore other methods to look for it.
• □ □ □ □ □ □ OSC Garrard is working with Operations to evaluate potential options for controlling source material at leak site prior to discharging to Pond 2.
•□□□□□□ A fuel/water mixture continues to drain out of the leak site to Pond 2. As of this morning, the quantity has been reduced to approximately 1 quart per minute. The fuel to water ratio is estimated at 20%, respectively.
• □ □ □ □ □ Visual observations indicate gasoline on Pond 2 covers approximately one third of the pond and thickness to be approximately 1-inch, where it pooled (see photo below).
• • • • • • • • • • • • • • • • • • •

Vacuum trucks from 2b are transferring recovered product to four storage tanks at staging 2b. There are two storage tanks at staging 2a, to contain recovered product in that area. This evening, Boom was placed across Pond 2 to keep the pooled product in the northeast portion of the pond contained in that area.
•□□□□□□□ Pipeline draining activities continue at stopple 2.
•□□□□□□□ Excavation did not occur during this reporting period.
• □ □ □ □ □ Inclement weather caused activities to shut down for a period of time this morning.
•□□□□□□□ Installation of an additional underflow dam in Peel Creek, approximately 200 feet southeast of the Cahaba River is progressing. Operations anticipates completion tomorrow.
2) Environmental Sampling and Impacts
a. Air Monitoring
•□□□□□□ Work interruptions continue due to excessive benzene and LEL readings. Today's VOC's peaked at 768 parts per million (ppm) at the 2a recovery; benzene peaked at 5.7 ppm at the 2a recovery; and LEL peaked at 8% at stopple 2.
•□□□□□□ One START member continues to conduct oversight of air monitoring activities.
b. Surface Water
•□□□□□□□ One START member continues to collect split surface water samples with CPC. START obtained split samples from Pond 3, Peel Creek, and the Cahaba River in coordination with the Cahaba River Keeper and CPC's environmental consultant.
•□□□□□□□ An EPA OSC and START kayaked the Cahaba River from the confluence of the with Peel Creek to approximately 2 miles down streams. Water samples were collected. No sheen was observed on the River.
•□□□□□□□ EPA received preliminary water sample data for September 16 and 17, 2016. Laboratory analytical results reveal the presence of site specific

constituents in concentrations similar to CPC's data. The surface water sample collected at the confluence of Peel Creek and the Cahaba River on September 16, 2016 contained total petroleum hydrocarbon (TPH) gasoline range organics (GRO) at an estimated concentration of 0.064 milligrams per kilogram (mg/kg). This detection is low and may not be related to the spill. Subsequent sampling at this location did not identify site specific constituents above the laboratory reporting limit. EPA will continue to collect surface water samples in the area and monitor for any changes.
• □ □ □ □ □ □ The sample collected at this location the following day did not detect any site specific constituents above the laboratory reporting limit.
c. Wildlife Impacts
• • • • • • • • • • • • • • • • • • •
•□□□□□□□ To date, seven mammals including a rabbit, two raccoons, one fox, one coyote, one otter, and one armadillo have been impacted; four reptiles (turtle) has been impacted; and two birds (a duck and one white bird) have been impacted. The white bird remains in a restricted area and teams have not been able collect it; however, it is assumed to be an egret.
3) Health and Safety Oversite
•□□□□□□ EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress.
• □ □ □ □ □ Two GST members continue to observe night operations.
•□□□□□□□ The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

4) Restoration of Services

PLANNED RESPONSE ACTIVITIES

Inclement weather may impact night ops but is not expected during the next operation period. The following activities are planned during the next operation period:
• □ □ □ □ □ Continue to participate in UC
• □ □ □ □ □ Monitor removal activities
• □ □ □ □ □ START will continue to collect additional split surface water samples with the CPC environmental contractor and the Cahaba River Keeper. Water samples will be collected from Pond #2.
• □ □ □ □ □ START will continue to monitor CPC's air monitoring efforts
• □ □ □ □ □ Participate in the Joint Information Center
• □ □ □ □ □ Prepare for and coordinate a transition to a removal phase
●□□□□□□ CPC will pre-stage oil containment booms on the Cahaba River
• □ □ □ □ □ Continue to install the additional underflow dam near the confluence of Peel Creek and the Cahaba River
• □ □ □ □ □ Pre-stage aeration equipment along Peel Creek.
• □ □ □ □ □ Complete pipeline bypass and restore service.
• □ □ □ □ □ Continue recovery of fuel from Pond 2
• □ □ □ □ □ Continue removal of fuel from the plugged pipeline
• • • • • • • • • • • • • • • • • • •

SITUATIONAL REFERENCE MATERIAL

<image003.jpg>
Aerial photographic taken today. Pond #3 is on the left; Pond #2 is on the right. Fuel has

been confined to the upper 1/3 of the pond.

<image005.png>Overview of EPA Surface Water Sampling Locations

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

<Pelham_Pipeline_Spill_SITREP_9_09182016_Draft.docx>

To:

Moore, Tony[moore.tony@epa.gov]

From:

Harper, Greg

Sent:

Sat 9/17/2016 11:55:46 PM

Subject: RE: Sitrep 8

You are welcome

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Moore, Tony

Sent: Saturday, September 17, 2016 7:50 PM **To:** Harper, Greg Harper.Greg@epa.gov

Subject: Re: Sitrep 8

Incorporate yours into mine. Thanks and good job

Sent from my iPhone

On Sep 17, 2016, at 7:46 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Do you want me to forward my edits or incorporate my into your's?

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Moore, Tony

Sent: Saturday, September 17, 2016 7:34 PM **To:** Harper, Greg < <u>Harper.Greg@epa.gov</u>>

Subject: Re: Sitrep 8

Ignore that one

Sent from my iPhone

On Sep 17, 2016, at 7:17 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Thanks

Sent from my iPhone

On Sep 17, 2016, at 7:16 PM, Eichinger, Kevin < <u>Eichinger.Kevin@epa.gov</u>> wrote:

Here's the text. We are including a map and pict so I will get you the doc shortly:

INCIDENT SUMMARY

On September 9, 2016, at 1359 hours CDT, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" below ground pipeline to the National Response Center. The gasoline traveled overland for approximately 500 feet to a

pond that feeds into Peel Creek (which is a tributary of the Cahaba River).

CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons – 336,000 gallons).

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area. The nearest residential neighborhood and commercial area is located two miles from the spill location.

INCIDENT MANAGEMENT AND STAFFING

OSC Chuck Berry integrated into Unified Command initially and demobilize on September 17, 2016. OSC Kevin Eichinger resumed EPA's position in Unified Command.

OSCs, the United States Coast Guard (USCG) Gulf Strike Team (GST) and the Superfund Technical Assessment and Response Team (START) are embed in the Operations Sections.

An OSC and START are embed in the Environmental Unit.

EPA Public Affairs Specialist and a Public Information Officer are also assigned to the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 5

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

Total number of response Personnel: 739

CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate - 6000 bbl to 8000 bbls

Recovery/Loss to the Environment Volumes:

Fuel/Waste Recovery Volume Since Last SITREP Total Volume to Date

Recovered from Pond #2 200 gallons 85,976 gallons loss to the Environment due 28,335 gallons 229,040 gallons

Loss to the Environment due 28,335 gallons to Evaporation

TBD TBD

Bond in the Soil Petroleum Contact Water

242,155 gallons

CURRENT OPERATIONS

1) Product Recovery and Removal

•□□□□□□ A 6-inch pipe was observed to discharge water from Pond 3; however, flow was restricted likely due to a blockage. CPC has installed a plug in the 6-inch pipe attached to Pond 3 to help reduce the potential of petroleum impacted water being released. The water level was measured before installation and 24-hours after installation of the plug. Installation of the plug caused the water level to rise approximately 1-inch.
• CPC continues to evaluate plugging the culvert between Pond 2 and Pond 3. They intend to send a camera in the area tomorrow to determine the best method to seal it.
•□□□□□□□ CPC completed the new soil staging area last night and moved the excavated pile (generated during the previous operational period) to the new location. EPA advised CPC to have a secondary storage area ready in the event

additional soil is excavated. •□□□□□□□ Elevated benzene and lower explosive limit (LEL) continues to hinder progress. Minimal excavation occurred overnight due to elevated LEL and benzene readings at the leak site. CPC has excavated an estimated 40 tons of soil. Local firefighters continued to use a vapor suppressant agent during excavation activities • 🗆 🗆 🗅 Due to health and safety reasons, product recovery operations shut down while excavation occurs at the leak site. As excavation activities break or suspend due to elevated LEL and benzene levels, product recovery operations resume in Pond 2. Product recovery occurs at two points, southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily used drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to 4 storage tanks at staging 2b. There are 2 storage tanks at staging 2a where they are recovering product from recovery point 2a. Excavation activities and elevated LEL and benzene levels limited product recover efforts today. •□□□□□□□ Inclement weather caused activities to shut down for a period of time. • 🗆 🗆 🗆 Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch. 2) **Environmental Sampling and Impacts** Air Monitoring • \(\subseteq \ Today's VOC's peaked at 270 parts per million (ppm) at the 2a compressor; benzene peaked at 2.4 ppm at the release site; and LEL peaked at 26% at stopple 2. •□□ Two START members continue to conduct oversight of air monitoring activities b. Surface Water •□□ Two START members continue to collect split surface water samples with CPC. Split samples were collected from the Cahaba River in coordination with the Cahaba River Keeper and CPC's environmental consultant. START was unable to collect split samples from Pond 3 and Peel Creek due to excavation at

the leak site; however, CPC's environmental consultant had a crew in the area and was able to collect samples from this area. Preliminary EPA water sample data should be received tonight.

c. Wildlife Impacts

•□□ The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, five mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it. No additional impacted wildlife was reported during this operation period.

3) Health and Safety Oversite

• 🗆 🗆 🗆 EPA/GST remains incorporated into Operations and air monitoring.
OSC Garrard, OSC Tripp, and two GST members continue to provide oversight
of site safety and monitor the operations progress. Two GST members continue to
observe night operations.

• ☐ ☐ ☐ ☐ The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

4) Restoration of Services

□□□□□□□ CPC requested a waiver of the prohibition for commingling
provisions are found in 40 C.F.R. § 80.78(a)(7) that prohibits any person from
combining any reformulated gasoline blendstock for oxygenate blending with any
other gasoline, blendstock, or oxygenate, unless certain conditions are met. The
waiver request was issued on September 16, 2016 and will expire October 6,
2016.

• CPC continues to stage material and prepare for pushing the pig
through the pipe to remove the remaining product. This process is anticipated to
begin on Sunday afternoon and will be complete Monday morning.

• 🗆 🗆 🗆 🗆 CPC continues to implement the	e plan to install an approximate 1,000
foot section of pipe to by-pass the leak site.	This plan was developed with the

input of Pipeline and Hazardous Materials Safety Agency (PHMSA). Once installed, the pipeline can resume service.

ng

and the Cahaba River

•□□□□□□ Plans continue to be developed and will be reviewed by IC when ready.
•□□□□□□□ The City of Helena operates the closest drinking water well. It is located approximately 5 miles for the release site. City Helena Utilities is conducting well water sampling for the constituents found in gasoline.
PLANNED RESPONSE ACTIVITIES
Inclement weather is expected again during the next operation period which may affect planned activities. The following activities are planned during the next operation period:
•□□□□□□ Continue to participate in UC
•□□□□□□ Monitor removal activities
•□□□□□□□ START will continue to collect additional split surface water samples with the CPC environmental contractor and the Cahaba Riverkeeper
•□□□□□□□ START will continue to monitor CPC's air monitoring efforts
•□□□□□□ Monitor safety air monitoring
•□□□□□□ Participate in the Joint Information Center
•□□□□□□ Prepare for and coordinate a transition to a removal phase
●□□□□□□□ CPC will pre-stage oil containment booms on the Cahaba River
• • • • • • • • • • • • • • • • • • •

• DDUUL Pre-stage aeration equipment along Peel Creek.
•□□□□□□□ Complete pipeline bypass and restore service.
•□□□□□□□ Continue recovery of fuel from Pond 2
•□□□□□□ Continue removal of fuel from the plugged pipeline

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

To:

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Fri 9/16/2016 11:29:30 PM

Subject: Re: SITREP #7

Minor corrections made, good to go .

Sent from my iPhone

On Sep 16, 2016, at 7:04 PM, Harper, Greg < Harper. Greg@epa.gov > wrote:

Tony,

I have not read this yet, I have a spill notification I have to work. If you will read and edit I will send it out to everyone.

Thank you, Greg

Sent from my iPhone

Begin forwarded message:

From: "Eichinger, Kevin" < Eichinger. Kevin@epa.gov>

Date: September 16, 2016 at 6:48:23 PM EDT To: "Harper, Greg" < Harper. Greg@epa.gov>

Subject: SITREP #7

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to CPC was made by a state mining inspector, however no volume estimate was provided at the time. CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons - 336,000 gallons).

The local fire department responded and established a secured zone around the spill site. Local responders detected hazardous conditions due to potentially explosive vapor concentration around the spill location. Shelby County Emergency Management responded and confirmed that no public or private drinking water sources are currently threatened by the spill.

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

CPC confirmed that the impacted transmission line is shut down. Environmental contractors for CPC are on site to conduct air monitoring and remediation activities. Delays to remediate the spill routinely occur due to elevated concentrations of volatile organic compounds (VOC), specifically benzene, and explosive vapors exceeding the lower explosive limit (LEL).

EPA consulted with the Department of Interior (DOI) and the State of Alabama to identify threatened and endangered (T&E) species in the area of the spill. To EPA's knowledge, no impacts to T&E species have been reported at this time; however, field crews have noted minimal impacts to wildlife in the spill area.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, CPC, ADEM, and Shelby County. OSC Berry will demobilize on September 17, 2016. OSC Kevin Eichinger will assume EPA's position in Unified Command. OSC Garrard, OSC Tripp and four US Coast Guard Gulf Strike Team members remain deployed to assist with field observations. OSC Stilman remains deployed to assist in the Environmental Unit. Kerisa Coleman, a Region 4 public affairs specialist, arrived September 16, 2016 to assist in the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 6

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

A 6-inch pipe was observed discharging water from Pond 3; however flow was restricted and likely due to a blockage. CPC has installed a plug in the pipe to reduce the potential of petroleum impacted water being released.

The elevated benzene and LEL continue to be the greatest limiting factor to recovery operations. CPC contractor, Center for Toxicology and Environmental Health, LLC (CTEH), remain on site providing air monitoring services. CTEH continues monitoring air quality in the work zones and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excessive benzene and LEL readings. Today's VOC exceedance levels range from 0 – 1,351.3 (Pond 2a compressor) parts per million (ppm). The exceedances from benzene range 0.05-3 (release site) ppm. LEL exceedance levels range from 0% - 10% (Release site).

CPC has managed to recover approximately 286,481 gallons of fuel and 233,228 gallons of mixed oil/water to date.

CPC performed an mass balance calculation and determined an estimated volume of 252,000 gallons of fuel was discharged. That number has been revised to an estimated 336,000 gallons. They estimate 200,705 gallons of fuel evaporated as of 9/16/16. These numbers are approximate and CPC will perform a final mass balance after product recovery activities are complete.

Diversions designed for Pond 3 include a weir and two underflow dams (at the Pond outfall). CPC continues to monitor Pond 3. No oil sheening has been seen along the shoreline on Pond 3. Unified Command (UC) will be notified if any petroleum is observed. OSC Garrard, along with the Gulf Strike Team (GST) and CPC personnel identified additional locations along Peel Creek for potential placement of an additional underflow dam. CPC has agreed to reserve material to construct these features. CPC has estimated a 10-hour construction time for this final structure. To facilitate access, CPC completed construction of an access road along the entire length of Peel Creek.

No adverse weather impacts are expected for the next operational period.

EPA/GST remain incorporated into Operations Section and air monitoring activities. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

Kerisa Coleman is representing EPA in the Joint Information Center (JIC).

The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

Two START members continue the collection of split surface water samples with CPC and conducting oversight of air monitoring activities. Split samples were collected from Pond 3 and confluence of Peel Creek and Cahaba River. In additional, a third START is providing ICS support.

EPA approved the vapor suppression plan and evacuation plan; subsequently, excavation in the area of the damaged pipe began at 1530 this afternoon. Local firefighters used a vapor suppressant agent during excavation activities.

Product recovery operations continue in Pond 2 at two points, southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily used drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to 4 storage tanks at staging 2b. There are 2 storage tanks at staging 2a where they are recovering product from recovery point 2a.

There are currently 14 storage tanks at the main staging area. Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

There are approximately 721 response worker onsite.

The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, four mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it.

A Regional Response Team (RRT4) call was held today to update RRT4 members.

See https://helena.colonialresponse.com/ for information on related to restoration of service.

PLANNED RESPONSE ACTIVITIES

The EPA OSC has requested that START collect additional surface water samples with the Cahaba Riverkeeper. START will collect the samples during the next operational period. START and OSC Stilman will continue to monitor CPC's sampling and monitoring efforts. The following activities remain unchanged and continue during the response efforts:

●□□□□□□□ Continue to participate in UC

•
●□□□□□□ Monitor safety air monitoring
• □ □ □ □ □ Participate in the Joint Information Center
• □ □ □ □ □ Prepare for and coordinate a transition to a removal phase
• 🗆 🗆 🗆 Preform water sampling

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

<Pelham_Pipeline_Spill_SITREP_7_09162016_DRAFT.docx>

To: Moore, Tony[moore.tony@epa.gov]

From: Harper, Greg

Sent: Fri 9/16/2016 11:04:00 PM

Subject: Fwd: SITREP #7

Pelham Pipeline Spill SiTREP 7 09162016 DRAFT.docx

ATT00001.htm

Tony,

I have not read this yet, I have a spill notification I have to work. If you will read and edit I will send it out to everyone.

Thank you, Greg

Sent from my iPhone

Begin forwarded message:

From: "Eichinger, Kevin" < Eichinger. Kevin@epa.gov>

Date: September 16, 2016 at 6:48:23 PM EDT **To:** "Harper, Greg" < <u>Harper.Greg@epa.gov</u>>

Subject: SITREP #7

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to CPC was made by a state mining inspector; however no volume estimate was provided at the time. CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond. The spill volume has since been updated to between 6,000 barrels [bbls] and 8000 bbls (252,000 gallons – 336,000 gallons).

The local fire department responded and established a secured zone around the spill site. Local responders detected hazardous conditions due to potentially explosive vapor concentration around the spill location. Shelby County Emergency Management responded and confirmed that no public or private drinking water sources are currently threatened by the spill.

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) have integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is located in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

CPC confirmed that the impacted transmission line is shut down. Environmental contractors for CPC are on site to conduct air monitoring and remediation activities. Delays to remediate the spill routinely occur due to elevated concentrations of volatile organic compounds (VOC), specifically benzene, and explosive vapors exceeding the lower explosive limit (LEL).

EPA consulted with the Department of Interior (DOI) and the State of Alabama to identify threatened and endangered (T&E) species in the area of the spill. To EPA's knowledge, no impacts to T&E species have been reported at this time; however, field crews have noted minimal impacts to wildlife in the spill area.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, CPC, ADEM, and Shelby County. OSC Berry will demobilize on September 17, 2016. OSC Kevin Eichinger will resume EPA's position in Unified Command. OSC Garrard, OSC Tripp and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. OSC Stilman remains deployed to assist in the Environmental Unit. Kerisa Coleman, a public affairs specialist, arrived September 16, 2016 to assist in the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 6

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

A 6-inch pipe was observed to discharge water from Pond 3; however flow was restricted and likely due to a blockage. CPC has installed a plug in the 6-inch pipe attached to Pond 3 to help reduce the potential of petroleum impacted being released.

The elevated benzene and LEL continue to be the greatest limiting factor to recovery operations. CPC contractor, Center for Toxicology and Environmental Health, LLC (CTEH), remain on site providing air monitoring services. CTEH continues monitoring air quality in the work and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excessive benzene and LEL readings. Today's VOC exceedance levels range from 0-1,351.3 (Pond 2a compressor) parts per million (ppm). The exceedances from benzene range 0.05-3 (release site) ppm. LEL exceedance levels range from 0% - 10% (Release site).

CPC has managed to recover approximately 286,481 gallons of fuel and 233,228 gallons of mixed oil/water to date.

CPC performed an initial mass balance calculation and determined an estimated volume of 252,000 gallons of fuel was discharged. That number has been revised to an estimated 336,000 gallons. They estimate 200,705 gallons of fuel evaporated as of 9/16/16. These numbers are approximate and CPC will perform a final mass balance after product recovery activities are complete.

Diversions designed for Pond 3 include a weir and two an underflow dam (at the Pond outfall). CPC continues to monitor Pond 3. No oil sheening has been seen along the shoreline on Pond 3. Unified Command (UC) will be notified if any petroleum is observed. OSC Garrard, along with the Gulf Strike Team (GST) and CPC personnel identified additional locations along Peel Creek for potential placement of an additional underflow dam. CPC has agreed to reserve material to construct these features. CPC has estimated a 10-hour construction time for this final structure. To facilitate access, CPC completed

construction of an access road along the entire length of Peel Creek.

No adverse weather impacts are expected for the next operational period.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

Kerisa Coleman is representing EPA in the Join Information Center (JIC).

The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

Two START members continue to collect split surface water samples with CPC and conduct oversight of air monitoring activities. Split samples were collected from Pond 3 and confluence of Peel Creek and Cahaba River. In additional, a third START is providing ICS support.

EPA approved the vapor suppression plan and evacuation plan; therefore excavation in the area of the damaged pipe began at 15:30 this afternoon. Local firefighters used a vapor suppressant agent during excavation activities.

Product recovery operations continue in Pond 2 at two points, southwestern portion of the Pond (2a) and northeast portion of the Pond (2b). CPC primarily used drum skimmers to capture free product from Pond 2. Vacuum trucks from 2b are transferring recovered product to 4 storage tanks at staging 2b. There are 2 storage tanks at staging 2a where they are recovering product from recovery point 2a.

There are currently 14 storage tanks at the main staging area. Visual observations indicate gasoline thickness on Pond 2 to be approximately 1-inch.

There are approximately 721 response worker onsite.

The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. To date, four mammals including a rabbit, two raccoons, one fox, and one armadillo have been impacted; one reptile (turtle) has been impacted; and one white bird has been impacted. The bird is located in a restricted area and teams have not been able to get to it.

A Regional Response Team (RRT4) call was held today to update RRT4 members.

See https://helena.colonialresponse.com/ for information on related to restoration of service.

PLANNED RESPONSE ACTIVITIES

The EPA OSC has requested that START collect additional surface water samples with the Cahaba Riverkeeper. START will collect the samples during the next operational period. START and OSC Stilman will continue to monitor CPC's sampling and monitoring efforts. The following activities remain unchanged and continue during the response efforts:

• LILLILL Continue to participate in UC
●□□□□□□ Monitor removal activities
●□□□□□□ Monitor safety air monitoring
●□□□□□□ Participate in the Joint Information Center
●□□□□□□□ Prepare for and coordinate a transition to a removal phase
•□□□□□□ Preform water sampling

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

To:

Kemker, Carol[Kemker.Carol@epa.gov]

Cc:

Moore, Tony[moore.tony@epa.gov]; Hill, Franklin[Hill.Franklin@epa.gov]; Davis,

Anita[Davis Anita@epa.gov]; Gettle, Jeaneanne[Gettle.Jeaneanne@epa.gov] Webster, James

From: Sent:

Fri 9/16/2016 1:20:19 AM

Subject: Re: EOC Spot Report: Region 4, Colonial Pipeline Spill, Pelham, AL (NRC # 1158584) -

Update #5

Thank u so much.

Sent from my iPhone

On Sep 15, 2016, at 9:19 PM, Kemker, Carol < Kemker. Carol@epa.gov > wrote:

Will do.

Sent from my iPhone

On Sep 15, 2016, at 8:59 PM, Webster, James < Webster. James@epa.gov > wrote:

It's ok tony.

Carol,

Can we loop superfund in on requests as they come in?

Sent from my iPhone

On Sep 15, 2016, at 8:51 PM, Moore, Tony < moore.tony@epa.gov > wrote:

This is my first hearing of a TN waiver

Sent from my iPhone

On Sep 15, 2016, at 8:49 PM, Hill, Franklin < Hill.Franklin@epa.gov > wrote:

Sent from my iPhone

Begin forwarded message:

From: "Meiburg, Stan" < Meiburg.Stan@epa.gov> Date: September 15, 2016 at 6:46:22 PM EDT

To: "Heard, Anne" < Heard. Anne@epa.gov >, "Lapierre, Kenneth"

< Lapierre.Kenneth@epa.gov >, "Hill, Franklin"

< Hill.Franklin@epa.gov >, "Kemker, Carol"

< Kemker.Carol@epa.gov>, "Wilkes, Mary" < Wilkes.Mary@epa.gov>

Subject: Fwd: EOC Spot Report: Region 4, Colonial Pipeline Spill,

Pelham, AL (NRC # 1158584) - Update #5

Note: this SITREP did not include, but should have, the associated request by TN for an RVP waiver.

Stan

Sent from my iPhone

Begin forwarded message:

From: "Eoc, Epahq" < Eoc. Epahq@epa.gov > Date: September 15, 2016 at 11:59:56 AM CDT

To: "Eoc, Epahq" < Eoc. Epahq@epa.gov >

Subject: EOC Spot Report: Region 4, Colonial Pipeline Spill,

Pelham, AL (NRC # 1158584) - Update #5

This report is being sent as a bcc to prevent accidental Reply to All messages.

UNCLASSIFIED//FOR OFFICIAL USE ONLY

<image001.png>

EOC Spot Report: Region 4, Colonial Pipeline Spill into Pond Near Peel Creek, Pelham, AL (NRC # 1158584) – Update #5

US Environmental Protection Agency

Report as of 1300 ET on 09/15/2016

Overview: On September 9th at 1449 ET, Colonial Pipeline reported to the National Response Center that there was a gasoline spill from a 36" subsurface transmission line. Gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek, a tributary of the Cahaba River. An estimated 6,000 barrels of gasoline (253,000 gallons) have been discharged as a result of the leak. The spill location is in a remote location so no evacuations are necessary. The nearest residential neighborhood is located two miles away.

Colonial Pipeline crews continue to prepare the affected pipeline segment for excavation and repair while cleaning up the spill. Colonial Pipeline continues to collaborate with local, state and federal agencies, including the Environmental Protection Agency, Shelby County Emergency Management Agency, Helena Fire Department, Pelham Fire Department, and others in connection with the response. As a precautionary measure, airspace above the release location has been restricted to further protect responders, personnel and the public. According to the FAA, the restriction will remain in effect until 9/18/16.

Colonial has removed approximately 178,217 gallons of liquid from Pond 2. Of that volume, 48,125 gallons of oil have been separated and 130,092 gallons of mixed oil/water remain. Colonial established a pumping area on the north end of the pond where vapor levels were lower. Vacuum trucks continue to pump from this location. Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 144,035 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The high level of explosive vapors is the greatest limiting factor to recovery operations. Colonial contractor CTEH is on site providing air monitoring services. All personnel entering the hot zone are required to have flame resistant clothing and an air monitoring escort. Action levels for benzene, VOCs and explosive vapors have been established.

The diversions designed for Pond 3 are in place, which include a substantial underflow dam at the pond's outfall. No oil sheening is visible along the shoreline at Pond 3. Colonial continues to monitor the pond and will notify Unified Command if any petroleum is observed.

State, Local and other Federal Agency Actions: The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. The Shelby County Emergency Management Association (EMA) responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State- and County-level agencies. An Incident Command post was established in Hoover, Alabama. United States Coast Guard (USCG) Gulf Strike Team (GST) members have been assisting with health and safety oversight and response operations.

EPA Actions: Four EPA Region 4 personnel and 4 USCG Strike Team Members are currently deployed to assist with the response and are integrated into Unified Command. EPA and USCG GST members are incorporated into air monitoring efforts. A Community Involvement Coordinator (CIC) is assisting at the Joint Information Center (JIC). The JIC set up two interviews with all members of UC. The Birmingham, AL news outlets were WBRC and AL.com. At this time, a Regional Response Team 4 (RRT4) activation is not planned. A Natural Resources Trustee consultation was held with a Region 4 Department of Interior representative. Threatened and endangered species in the area of the spill have been identified but are not impacted. Due to the ongoing response efforts, the EPA OSC will make a request to the

National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

Media Interest: Low (local)

http://www.al.com/news/index.ssf/2016/09/pipeline leak spilled an estim.html

The HQ EOC will continue to monitor and provide updates as needed.

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Eugene Lee, Senior Watch Officer

U.S. Environmental Protection Agency

Headquarters Emergency Operations Center

1200 Pennsylvania Ave

Washington, DC 20004

202-564-3850

mailto:eoc.epahq@epa.gov

To:

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent: Fri 9/

t: Fri 9/16/2016 12:39:41 AM

Subject: Re: SITREP #6

Good to go

Sent from my iPhone

On Sep 15, 2016, at 8:22 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

<image002.jpg>

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #6

1800 CDT, September 15, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by a state mining inspector, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has since been updated in NRC Reports to 252,000 gallons – See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) and EPA have integrated into Unified Command and are

coordinating with State and County Agencies. An Incident Command Post is being operated out of Pelham, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of explosive vapors and volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Consult with the Department of Interior and the State of Alabama identified threatened and endangered (T&E) species in the area of the spill. However, no T&E species have been reported impacted from the spill, although several common species have been impacted.

The appropriate members were engaged during the initial response notification process. The following members were part of the initial notification: ADEM; Department of the Interior (DOI); and United States Environmental Protection Agency (USEPA). A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Garrard, OSC Tripp and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. OSC Stilman has been deployed to assist with Incident Command. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center (JIC).

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 3

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

Both stopples are in place. Colonial has ceased recovering product from the line as the nitrogen displacement has reached its maximum efficacy. Colonial has developed a displacement plan to use water to displace the remainder of the fuel. Activities for this operations are estimated to be ready by Saturday. Fuel continues to leak from the break, but at a much reduced rate.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remain on site providing air monitoring services. CTEH continues monitoring the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excessive benzene and LEL readings. Today's VOC exceedance levels range from 30 - 2,699 parts per million (ppm). The exceedances from benzene range 0.6 - 18 ppm. LEL exceedance levels range from 10% - 196%.

Colonial has managed to remove approximately 233,614 gallons of liquid from Pond 2. Of that volume 58,461 gallons of fuel has been recovered and 175,531 gallons of mixed oil/water remain in frac tanks.

Colonial performed an initial mass balance calculation and determined an estimated volume of 252,000 gallons of fuel was discharged. They are estimating 180,634 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the pond outfall. Colonial continues to monitor Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. OSC Garrard, OPS, was on site in the morning exploring areas along Peel Creek with GST and Colonial personnel for potential placement of an additional underflow dam. Additional locations

were identified, and Colonial has agreed to reserve material to construct these features. Additionally, Colonial has estimated a 10-hour construction time for this final structure. To facilitate access, Colonial is building an access road along the entire length of Peel Creek.

No adverse weather impacts are expected for the next operational period.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard, OSC Tripp, and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

James Pickney remains integrated with the JIC. One CIC is mobilizing to the site tomorrow. OSC Berry provided one telephone interview to the local NBC affiliate this afternoon.

The fire chief deemed the transfer of product from the pipeline to frac tanks was too highrisk, therefore operations were changed to direct tanker transfer. Scrubbers were used on the vacuum trucks while the vacuum trucks pumped product from the pipeline to the transport tanker trucks to reduce the gasoline vapors. The tanker trucks are making a round trip to Colonial's Pelham Junction facility to off-load.

The Federal Aviation Administration continues to maintain an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

OSC Tripp was on-site performing an observation of all operation areas with GST most of the day. The county sheriff's office was patrolling the site air space by helicopter to enforce the air restriction put in place by the FAA. During the night there was a drone being flown over the site by an unknown operator.

Two START members arrived on-scene to assist with surface water and sediment sampling operations. OSC Stilman mobilized in this morning as the Deputy IC for EPA and provided comments to the Surface water and sediment sampling plan. An additional START member is mobilizing in tonight to provide ICS support.

Work-site operations were ceased overnight due to increased VOCs, LEL, and benzene levels from 0230-0500. A temporary site-wide evacuation was ordered at 0300 due to elevated levels at the main staging area. Operations at the Stopples and the pond did not commence until 0830. Vapor scrubber units were switched out for a liquid vapor scrubber unit. Due to high LEL, the Unified Command has developed a Vapor Suppression Plan and a Site Evacuation Plan. Vapor suppression foam, F-500, will be used to allow for the soil excavation around the pipeline to continue.

Recovery operations are occurring at two points 2a and 2b. Vacuum trucks from 2b are transferring recovered product to 4 frac tanks at staging 2b. There are 2 frac tanks at staging 2a where they are recovering product from recovery point 2a.

There are currently 14 frac tanks at the main staging area. Visual observations indicate gasoline thickness on pond 2 to be 1-1.5 inches at recovery point 2b, less than 0.10 inch at recovery point 2a.

Colonial is implementing a backup plan for restoration of service by constructing a bypass around the leak. The use of this will be determined by the difficulties found during the success and timing of the water displacement plan and excavation of the break. Colonial has given a tentative restoration time of late next week.

PLANNED RESPONSE ACTIVITIES

Due to the ongoing response efforts and unknown timelines, the EPA OSC made a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

The EPA OSC has requested an additional START contractors to assist with Incident Command Post Operations. START and OSC Stilman will continue to monitor Colonial Pipeline's sampling and monitoring efforts.

\bullet	Continue to	participate	in	UC
		, bar and bare	***	\sim

• O O O O O O O O O O O O O O O O O O O
•□□□□□□ Monitor safety air monitoring
•□□□□□□ Participate in the Joint Information Center
• □ □ □ □ □ Prepare for and coordinate a transition to a removal phase
●□□□□□□□ Finalize Surface Water and Sediment Sampling Plan
◆□□□□□□ Finalize Vapor Suppression Plan
•□□□□□□ Finalize Site Evacuation Plan

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

To: Alexander, Malik[Alexander.Malik@epa.gov]
From: Moore, Tony
Sent: Thur 9/15/2016 6:28:04 PM
Subject: Pelham_Pipeline_Spill_SITREP_5_09142016.docx
Pelham_Pipeline_Spill_SITREP_5_09142016.docx
ATT00001.txt



NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #5

1800 CDT, September 14, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by the property owner, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has been updated to 235,000 gallons – See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Threatened and endangered (T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Garrard and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center (JIC).

OSC Garrard was mobilized to the site to overlap with OSC Williamson today, he will assume responsibilities for Operations. OSC Tripp mobilized to the site to serve as the EPA Situation Unit Leader. OSC Williamson demobilized during this operational period.

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

Both stopples are in place. Colonial is actively vacuuming out product and pressuring the line with nitrogen to increase recovery. The pressurization of the line increase the rate of discharge at the break. LEL levels at the break are too high to recover product at the break before it discharges to the stream and then into the pond.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remains on site providing air monitoring services. They continue monitoring the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excess benzene and LEL readings. Today's highest VOC level peaked at 989 parts per million (ppm). The highest benzene level recorded was 17.5 ppm. LEL levels were reported to be in the 41% range.

Colonial has managed to remove approximately 178,217 gallons of liquid from Pond 2. Of that volume 48,125 gallons of fuel has been recovered and 130,092 gallons of mixed oil/water remain.

Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 144,035 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the pond outfall. Colonial continues to monitor the Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. No adverse weather impacts are expected from the tropical system off the coast of Georgia.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

James Pickney arrived at Incident Command Center and integrated into JIC. The JIC set up two interviews with all members of UC, including OSC Berry. The Birmingham, AL news outlets were WBRC and AL.com. Additionally, Colonial visited 15 homes nearest to the spill site, they were able to discuss the situation with 9 households as well as handout fact sheets.

The fire chief deemed the transfer of product from the pipeline to frac tanks was to high risk, therefore operations changed to direct tanker to tanker trucks. Scrubbers were used on the vacuum trucks while the vacuum trucks pumped product from the pipeline to the transport tanker trucks to reduce the gasoline vapors. The tanker trucks are making a round trip to Colonial's Pelham Junction facility to off-load.

OSC Garrard called the Federal Aviation Administration to request an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

UC learned during today's UC meeting, Colonial contractor began collecting water sampling on Saturday

when the sample results were presented during the UC briefing. 9 sampling locations have been established, two water sample collected from Pond 3 had benzene detected at 90 mg/L and 98 mg/L the other 7 were below detection limits.

PLANNED RESPONSE ACTIVITIES

Due to the ongoing response efforts and unknown timelines, the EPA OSC will make a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

Because UC learned during today's UC meeting, Colonial contractor began collecting water sampling on Saturday when the sample results were presented during the UC briefing. EPA OSC has requested two START contractors and an Environmental Unit Leader to monitor Colonial Pipeline's sampling efforts.

- Continue to participate in UC
- Monitor removal activities
- Monitor safety air monitoring
- Participate in the Joint Information Center
- Prepare for and coordinate a transition to a removal phase
- Preform water sampling

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Thur 9/15/2016 1:10:45 PM

Subject: Re: SITREP #5 - Pelham Pipeline Spill

Yes

Sent from my iPhone

On Sep 15, 2016, at 9:06 AM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Tony,

Do we want to include DHS on daily ERNS? I am now including Mr. Williams on the Pelham SITREPs. But if there was another large spill we would not know to include him.

Thank you,

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response Removal and Preparedness Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

From: Weeks, Victor

Sent: Thursday, September 15, 2016 8:59 AM

To: Harper, Greg < Harper. Greg@epa.gov >
Subject: FW: SITREP #5 - Pelham Pipeline Spill

Greg:

Do you know if we can add DHS employees to the ERNS distribution list?

Victor L. Weeks

U.S. EPA Region 4

Air, Pesticides & Toxics Management Division

Chemical Emergency Preparedness & Prevention Coordinator

Atlanta Federal Center

61 Forsyth ST

Atlanta, Georgia 30024

Direct: 404-562-9189

Cell: 770-363-7715

FAX: 404-562-9163

From: Williams, James [mailto:James.Williams@HQ.DHS.GOV]

Sent: Thursday, September 15, 2016 8:47 AM **To:** Weeks, Victor <<u>weeks.victor@epa.gov</u>>

Cc: Deas, William < william.deas@HQ.DHS.GOV >; Albini, David

<<u>David.Albini@HQ.DHS.GOV</u>>; Whittington, Angela <<u>Angela.Whittington@HQ.DHS.GOV</u>>; Gibbs, Kelly <<u>Kelly.Gibbs@HQ.DHS.GOV</u>> **Subject:** RE: SITREP #5 - Pelham Pipeline Spill

Victor,

Would it be possible for us to get on the distro of the region 4 SITREPS for events such as these?

Jim

James E. Williams

Supervisory Chemical Security Inspector

<image001.jpg>

Department of Homeland Security

Office of Infrastructure Protection

Infrastructure Security Compliance Division

Field Operations Branch

Cosby, TN

Mobile 202.604.8712

CFATS Help Desk: 1-866-323-2957

Questions Regarding: CSAT@DHS.GOV

WWW.DHS.GOV/CHEMICALSECURITY

Tip Line: 877-FYI 4 DHS (877 394-4347)

November is Critical Infrastructure Security and Resilience Month

For more information about critical infrastructure, visit http://www.dhs.gov/critical-infrastructure

"With honor and integrity, we will safeguard the American people, our homeland, and our values"

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From: Weeks, Victor [mailto:weeks.victor@epa.gov]
Sent: Thursday, September 15, 2016 8:28 AM

To: Garrard, Jordan Cc: Williams, James

Subject: FW: SITREP #5 - Pelham Pipeline Spill

Jordan:

James Williams with DHS was wondering if Colonial Pipeline has projected a date for when the pipeline will be returned to service?

Also, has Colonial Pipeline quantified any regional gasoline supply issues associated with this transmission pipeline incident?

Victor L. Weeks

U.S. EPA Region 4

Air, Pesticides & Toxics Management Division

Chemical Emergency Preparedness & Prevention Coordinator

Atlanta Federal Center

61 Forsyth ST

Atlanta, Georgia 30024

Direct: 404-562-9189

Cell: 770-363-7715

FAX: 404-562-9163

From: Harper, Greq

Sent: Wednesday, September 14, 2016 8:51 PM

Cc: Harper, Greg < Harper.Greg@epa.gov > Subject: SITREP #5 - Pelham Pipeline Spill

<image004.jpg>

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #5

1800 CDT, September 14, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by the property owner, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has been updated to 235,000 gallons – See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Threatened and endangered (T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Garrard and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center (JIC).

OSC Garrard was mobilized to the site to overlap with OSC Williamson today, he will assume responsibilities for Operations. OSC Tripp mobilized to the site to serve as the EPA Situation Unit Leader. OSC Williamson demobilized during this operational period.

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

Both stopples are in place. Colonial is actively vacuuming out product and pressuring the line with nitrogen to increase recovery. The pressurization of the line increase the rate of discharge at the break. LEL levels at the break are too high to recover product at the break before it discharges to the stream and then into the pond.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remains on site providing air monitoring services. They continue monitoring the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excess benzene and LEL readings. Today's highest VOC level peaked at 989 parts per million (ppm). The highest benzene level recorded was 17.5 ppm. LEL levels were reported to be in the 41% range.

Colonial has managed to remove approximately 178,217 gallons of liquid from Pond 2. Of that volume 48,125 gallons of fuel has been recovered and 130,092 gallons of mixed oil/water remain.

Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 144,035 gallons of fuel evaporated as of 9/13/16. These numbers are approximate and Colonial will perform a final mass balance after all product is recovered.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the pond outfall. Colonial continues to monitor the Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. No adverse weather impacts are expected from the tropical system off the coast of Georgia.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

James Pickney arrived at Incident Command Center and integrated into JIC. The JIC set up two interviews with all members of UC, including OSC Berry. The Birmingham, AL news outlets were WBRC and AL.com. Additionally, Colonial visited 15 homes nearest to the spill site, they were able to discuss the situation with 9 households as well as handout fact sheets.

The fire chief deemed the transfer of product from the pipeline to frac tanks was to high risk, therefore operations changed to direct tanker to tanker trucks. Scrubbers were used on the vacuum trucks while the vacuum trucks pumped product from the pipeline to the transport tanker trucks to reduce the gasoline vapors. The tanker trucks are making a round trip to Colonial's Pelham Junction facility to off-load.

OSC Garrard called the Federal Aviation Administration to request an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

UC learned during today's UC meeting, Colonial contractor began collecting water sampling on Saturday when the sample results were presented during the UC briefing. 9 sampling locations have been established, two water sample collected from Pond 3 had benzene detected at 90 mg/L and 98 mg/L the other 7 were below detection limits.

PLANNED RESPONSE ACTIVITIES

Due to the ongoing response efforts and unknown timelines, the EPA OSC will make a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

Because UC learned during today's UC meeting, Colonial contractor began collecting water sampling on Saturday when the sample results were presented during the UC briefing. EPA OSC has requested two START contractors and an Environmental Unit Leader to monitor Colonial Pipeline's sampling efforts.

- Continue to participate in UC
- Monitor removal activities

- Monitor safety air monitoring
- Participate in the Joint Information Center
- Prepare for and coordinate a transition to a removal phase
- Preform water sampling

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Thur 9/15/2016 1:02:30 AM

Subject: Re: SITREP #5 - Pelham Pipeline Spill

Sent from my iPhone

On Sep 14, 2016, at 8:51 PM, Harper, Greg < Harper. Greg@epa.gov > wrote:

<image003.jpg>

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #5

1800 CDT, September 14, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by the property owner, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has been updated to 235,000 gallons - See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Threatened and endangered (T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Garrard and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center (JIC).

OSC Garrard was mobilized to the site to overlap with OSC Williamson today, he will assume responsibilities for Operations. OSC Tripp mobilized to the site to serve as the EPA Situation Unit Leader. OSC Williamson demobilized during this operational period.

Current number of EPA Personnel Assigned: 4

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REPORTING SCHEDULE

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CURRENT OPERATIONS

Both stopples are in place. Colonial is actively vacuuming out product and pressuring the line with nitrogen to increase recovery. The pressurization of the line increases the rate of discharge at the break. LEL levels at the break are too high to recover product before it discharges to the stream and then into the pond.

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The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the pond outfall. Colonial continues to monitor the Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. No adverse weather impacts are expected from the tropical system off the coast of Georgia.

EPA/GST remains incorporated into Operations and air monitoring. OSC Garrard and two GST members continue to provide oversight of site safety and monitor the operation's progress. Two GST members continue to observe night operations.

James Pickney, Region 4 Office of External Affairs, arrived at Incident Command Center and integrated into JIC. The JIC set up two interviews for the media with all members of UC, including OSC Berry. The Birmingham, AL news outlets in attendance were WBRC and AL.com. Additionally, Colonial visited 15 homes nearest to the spill site, they were able to discuss the situation with nine households as well as hand out fact sheets.

The fire chief deemed the transfer of product from the pipeline to frac tanks was too high of a risk, therefore operations have changed to direct tanker to tanker trucks transfers. Scrubbers were used on the vacuum trucks while product was pumped from the pipeline to the transport tanker trucks to reduce the gasoline vapors. The tanker trucks are making a round trip to Colonial's Pelham Junction facility to off-loading.

OSC Garrard called the Federal Aviation Administration to request an aviation floor restriction of 2,500 feet in a 3-mile radius around the work site.

today's UC meeting, Colonial contractor began collecting water sampling on Saturday when the sample results were presented during the UC briefing. 9 sampling locations have been established, two water sample collected from Pond 3 had benzene detected at 90 mg/L and 98 mg/L the other 7 were below detection limits.

PLANNED RESPONSE ACTIVITIES

Due to the ongoing response efforts and unknown timelines, the EPA OSC will make a request to the National Pollution Fund Center (NPFC) to increase the site ceiling from \$45,000 to \$100,000.

During today's UC meeting, the UC learned that Colonial contractors had begun collecting water sampling on Saturday. Thus was only due to the presentation of sampling results were presented during the UC briefing. EPA OSC has requested two START contractors and an Environmental Unit Leader to monitor Colonial Pipeline's sampling efforts.

●□□□□□□ Continue to participate in UC
●□□□□□□ Monitor removal activities
●□□□□□□ Monitor safety air monitoring
• □ □ □ □ □ □ Participate in the Joint Information Center
• □ □ □ □ □ Prepare for and coordinate a transition to a removal phase

<Pelham_Pipeline_Spill_SITREP_5_09142016.pdf>

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Mon 9/19/2016 12:24:27 AM

Subject: Re: Pelham Pipeline Spill conference call

Ok

Sent from my iPhone

On Sep 18, 2016, at 8:23 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Tony,

Kevin would like to have a 2 eastern / 1 central time call tomorrow. To include you, Jim, Larry and anyone who you need to invite.

Will you set up that call again?

Thank you,

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Thur 9/15/2016 12:45:11 AM

Subject: Re: SITREP #5 - Pelham Pipeline Spill

Sent from my iPhone

On Sep 14, 2016, at 8:25 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Tony,

Please find the attached SITREP #5 from the Pelham Pipeline Spill.

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

<Pelham_Pipeline_Spill_SITREP_5_09142016.docx>

Harper, Greg[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Thur 9/15/2016 12:36:59 AM

Subject: Re: SITREP #5 - Pelham Pipeline Spill

Can you cut and paste this in the email

Sent from my iPhone

On Sep 14, 2016, at 8:25 PM, Harper, Greg < Harper.Greg@epa.gov > wrote:

Tony,

Please find the attached SITREP #5 from the Pelham Pipeline Spill.

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response and Removal Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

<Pelham_Pipeline_Spill_SITREP_5_09142016.docx>

Swan, Charles[swan.charles@epa.gov]

From:

Moore, Tony

Sent:

Wed 9/14/2016 5:34:27 PM

Subject: Fwd: Delivery of Mule 6 passanger (2 Bench)

Sent from my iPhone

Begin forwarded message:

From: "Berry, Chuck" < Berry. Chuck@epa.gov> Date: September 14, 2016 at 1:31:12 PM EDT

To: "Johnson, Dora Ann" < Johnson. Dora@epa.gov >

Cc: "Harper, Greg" < Harper.Greg@epa.gov >, "Corey CB. Brown"

<cbrown@bashaservices.com>, "Garrard, Jordan" < Garrard.Jordan@epa.gov>, "Moore,

Tony" < moore.tony@epa.gov>

Subject: Re: Delivery of Mule 6 passanger (2 Bench)

Dora Ann:

Do we need your approval on these requests? I thought Greg was added to the contract. A "you only" status will impede efficient mobilization of much needed resources.

Chuck Berry **EPA OSC** 404.859.0970

On Sep 14, 2016, at 11:56, Johnson, Dora Ann < <u>Johnson.Dora@epa.gov</u>> wrote:

Please assist Greg and Jordan in this request. Let me know if OT or lodging is required also due to the timing of the request.

Thank you,

Dora Ann Johnson

Team Lead / Project Officer

US EPA, Region IV

SD/RSIB/RMS

Phone: 404-562-8737

Cell: 404-754-6339

Email: Johnson.dora@epa.gov

From: Harper, Greg

Sent: Wednesday, September 14, 2016 12:09 PM
To: Corey CB. Brown < cbrown@bashaservices.com>

Cc: Johnson, Dora Ann < <u>Johnson.Dora@epa.gov</u>>; Garrard, Jordan < <u>Garrard.Jordan@epa.gov</u>>; Berry, Chuck < <u>Berry.Chuck@epa.gov</u>>

Subject: Delivery of Mule 6 passanger (2 Bench)

Corey,

Pelham Pipeline Spill has requested the delivery of the 6 passenger (2 Bench) Mule. It needs to be delivered today. Please coordinate the delivery with Jordan Garrad (678) 644-8648. Jordan will provide the delivery location.

The site is Pelham Pipeline Spill, Pelham, AL site ID V4CO

Thank you,

Greg

Gregory L. Harper

EPA On-Scene Coordinator

U.S. Environmental Protection Agency, Region 4

Emergency Response Removal and Preparedness Branch, 11th Floor

61 Forsyth Street. S.W.

Atlanta, Georgia 30303

Office (404) 562-8322

harper.greg@epa.gov

Greg Harper (Harper.Greg@epa.gov)[Harper.Greg@epa.gov]

From:

Moore, Tony

Sent:

Tue 9/13/2016 11:51:04 PM

Subject: Pelham_Pipeline_Spill_SITREP_4_09132016.docx Pelham_Pipeline_Spill_SITREP_4_09132016.docx

Use this version, if corrected stuff I corrected yesterday

Thanks



NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #4

1800 CDT, September 13, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River). The initial report to Colonial was made by the property owner, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond (the spill volume has been updated to 235,000 gallons)—See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area, and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline.

Threatened and endangered (T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry remains integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Williamson, and four US Coast Guard Gulf Strike Team members remain deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center.

OSC Garrard was mobilized to the site to overlap with OSC Williamson tomorrow, he will assume responsibilities for Operations. OSC Tripp mobilized to the site to serve as the EPA Situation Unit Leader.

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 CDT daily.

CURRENT OPERATIONS

The pipeline continues to drain into Pond 2 at a rate of approximately 3 gallons per minute. Colonial has installed both stopples, one currently set and the other is tapping through the pipeline emplacing the plug. The fuel will be vacuumed from the line and into trucks for shipment to the Colonial Pelham terminal.

The high level of explosive vapors continue to be the greatest limiting factor to recovery operations. Colonial contractor CTEH remains on site providing air monitoring services. They continue monitoring the AreaRAE network and providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs and explosive vapors remain as previously established. Work interruptions continue due to excess benzene and LEL readings. Today's highest VOC level peaked at 489 parts per million (ppm). The highest benzene level recorded was 4.8 ppm. LEL levels remain in the 100% range.

Colonial continues to increase its footprint at the site, building new roads to ease traffic congestion and allow for larger vehicles to access closer locations. A vapor recovery scrubber has been mobilized to the site to aid with vapor emissions. A decontamination pad for trucks has been constructed to decontaminate fuel-contaminated equipment.

Colonial has managed to remove approximately 107,304 gallons of liquid from Pond 2. Of that volume 18,928 gallons of fuel has been recovered and 88,376 gallons of mixed oil/water remain.

Colonial has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 115,700 gallons of fuel evaporated. 101,291 gallons of fuel is estimated to remain in the pond. These numbers are approximate and will likely change significantly over time.

The diversions designed for Pond 3 are in place. They include a substantial underflow dam at the pond outfall. Colonial continues to monitor the Pond 3. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. Significant rainfall may be received on site depending on the actions of a new tropical storm system forming in the Gulf of Mexico.

EPA/GST remains incorporated into Operations and air monitoring. OSC Williamson and two GST members continue on site safety and progress monitoring. Two GST members continue to observe night operations. OSC Williamson briefly met with the Vice President of Colonial during a VIP visit to the work site.

PLANNED RESPONSE ACTIVITIES

- Continue to participate in UC
- Monitor removal activities
- Monitor safety air monitoring
- Prepare for and coordinate a transition to a removal phase.

Rigger, Don[Rigger.Don@epa.gov]; Webster, James[Webster.James@epa.gov]

From:

Moore, Tony

Sent:

Mon 9/12/2016 1:26:02 AM

Subject: Fwd: SITREP #2 - Pelham Pipeline Release

image003.jpg ATT00001.htm

Pelham Pipeline Spill SITREP 2 final 09112016.pdf

ATT00002.htm

Here is the latest Sitrep

Sent from my iPhone

Begin forwarded message:

From: "Eichinger, Kevin" < Eichinger. Kevin@epa.gov> Cc: "Eichinger, Kevin" < Eichinger.Kevin@epa.gov> **Subject: SITREP #2 - Pelham Pipeline Release**

NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #2

1800, September 11, 2016

INCIDENT DESCRIPTION

On September 9, 2016, at 1449 hours, Colonial Pipeline reported a gasoline spill from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond (Pond 2 on the attached Figure) that feeds into Peel Creek which is a tributary of the Cahaba River. The initial report to Colonial was made by the property owner, but there was no volume estimate. The exact amount of the release was unknown; however, Colonial Pipeline initially reported to the responding OSC that between 1000 and 2000 gallons of gasoline entered the pond (the spill volume has been updated to 100,000 gallons in the pond – See "Current Operations" for more information).

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels have been detected around the spill location. Shelby County Emergency Management responded and confirmed that there are no public or private drinking water sources threatened by the spill. Alabama Department of Environmental Management (ADEM) has integrated into Unified Command and is coordinating with State and County Agencies. An Incident Command Post was established in Hoover, Alabama. The spill location is in a remote area, and no evacuations are necessary. The nearest residential neighborhood is located 2 miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline. There is an increased risk of rain for Sunday and

Monday September 11th and 12th.

Threatened and endangered species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

At this time, a Regional Response Team 4 (RRT4) activation is not planned. The appropriate members were engaged during the initial response notification process. A RRT4 call will be held if conditions change.

INCIDENT MANAGEMENT

On-Scene Coordinator (OSC) Chuck Berry was deploy to the Incident Command Post and has integrated into Unified Command, which includes EPA, Colonial, ADEM, and Shelby County. OSC Englert, OSC Williamson, and 4 US Coast Guard Gulf Strike Team members have been deployed to assist within field observations. A Public Information Officer (PIO) was requested and will assist in the Joint Information Center.

Current number of EPA Personnel Assigned: 3

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

REPORTING SCHEDULE

Situation Reports (SITREPS) will be delivered 1800 EDT daily.

CURRENT OPERATIONS

While the pipeline pumps are shut off, the pipeline continues to drain into Pond 2 The flow rate has lessened over the last day, but visually appears to be approximately 3 gallons per minute. Colonial continues to excavate the pipe and install stopples to block the flow, but hard rock has delayed this process. Colonial

currently estimates the pipe to be blocked and evacuated Tuesday. There is no update to the discharge volume.

The high level of explosive vapors is the greatest limiting factor to recovery operations. Colonial contractor CTEH is on site providing air monitoring services. They have set up an air monitoring network and are also providing roving and escort services for personnel working inside the hot zone. Lower Explosive Level (LEL) readings as high as 99% have been observed for short periods of time. Volatile Organic Compounds (VOC) levels remain high near the pond, with the highest observed level coming from a remote monitor at 2,999 parts per million (ppm). Benzene is also being monitored for, with a highest reading of 366.7 ppm. All personnel entering the hot zone are required to have flame resistant clothing and an air monitoring escort. Action levels for benzene, VOCs and explosive vapors have been set. Work is frequently stopped due to excess benzene and LEL readings, slowing recovery.

See the attached map for the layout of the emergency response site

Colonial has removed 18260 gallons of liquid from Pond 2. The initial tactic of pumping directly into vacuum trucks is being transitioned to pumping into portable tanks first, with vacuum trucks hauling the material to other portable tanks at the staging area. Currently, Colonial has been unable to pump due to elevated vapor levels; no product removal has occurred for the last 30 hours. There is no exact figure for the total volume of liquid in Pond 2, but the pond is 1.2 acres in size. Conservative estimates put the total volume approximately 1,000,000 gallons of petroleum contaminated water (3 feet deep).

Sheen was reported yesterday on Pond 3. UC decided to augment the existing protection, building an underflow dam and emplacing additional boom at the outfall. Subsequent investigation of the sheen showed it was biological in nature. However, it is assumed there is some hydraulic connectivity between the two ponds. Colonial is investigating additional diversion/collection structures further along the currently-dry Peel creek bed prior to its confluence with the Cahaba.

EPA/GST is incorporated into Operations and air monitoring. OSC Williamson and 2 GST members spent today on site monitoring safety and progress.

EPA/GST assisted Colonial with installation and planning of the Pond 3 augmentation and will continue to coordinate those efforts. OSC Englert is assuming Deputy Incident Commander role for EPA during the overnight shift, but will maintain a field presence. Two GST members will also assist with the overnight shift.

PLANNED RESPONSE ACTIVITIES

•□□□□□□ Continue to participate in UC	
•□□□□□□ Monitor removal activities	
●□□□□□□ Monitor safety air monitoring	
•□□□□□□□ Review and monitor the contingency booms and diversion act in preparation for future rain events. It should be noted that, based on the lavailable information now (which is limited due to terrain, vapors, and this	best

forest) there is little expectation for overtopping of the pond due to the small

Kevin Eichinger, CHMM - On-Scene Coordinator and Industrial Hygienist

U.S. Environmental Protection Agency, Region 4 | 61 Forsyth St SW | Atlanta, Georgia | 30303

Emergency Response, Removal and Prevention Branch (ERRB)

amounts of rain expected, based on NWS predictions.

office: 404-562-8268 | cell: 678-897-3759 | epaosc.org

Lapierre, Kenneth[Lapierre.Kenneth@epa.gov]; Gettle, To:

Jeaneanne[Gettle.Jeaneanne@epa.gov]; Kemker, Carol[Kemker.Carol@epa.gov]; Fite,

Mark[Fite.Mark@epa.gov]

Heard, Anne[Heard.Anne@epa.gov]; Hicks, Javoyne[Hicks.Javoyne@epa.gov]; Jones-Johnson, Shea[Jones-Johnson.Shea@epa.gov]; Jenkins, Brandi[Jenkins.Brandi@epa.gov]; Lincoln,

Larry[Lincoln.Larry@epa.gov]; Hill, Franklin[Hill.Franklin@epa.gov]; Worley,

Gregg[Worley.Gregg@epa.gov]; Webster, James[Webster.James@epa.gov]; Wise, Allison[Wise.Allison@epa.gov]; Delli-Gatti, Dionne[Delli-Gatti.Dionne@epa.gov]

From: Davis, Amber

Sent: Fri 9/16/2016 8:17:05 PM

Subject: RE: Waiver of Certain Reformulated Gasoline Regulations

I just got off the phone with Madison Le, the Director of the Fuels Compliance Policy Center in OTAQ. There are two types of wavier requests in the pipeline right now. One is for RFG and does not affect any Region 4 states. The other is for comingling RBOB and CBOB gasoline, and it affects all Region 4 states with the exception of Florida. In short, we need to call our contacts in AL, GA, KY, MS, NC, SC, and TN and get verbal concurrence from them to allow comingled gas to run through the pipeline in their states. Ideally, this would be completed within the next hour. Once we've gotten a response, we need to email Madison and let her know.

Amber Davis, Chief | Communities Support Section | U.S. Environmental Protection Agency | Region 4 | APTMD | 61 Forsyth St. SW | Atlanta, GA 30303 | Tel 404.562.9014 | davis.amber@epa.gov

From: Lapierre, Kenneth

Sent: Friday, September 16, 2016 2:59 PM

To: Davis, Amber < Davis. Amber@epa.gov>; Gettle, Jeaneanne < Gettle. Jeaneanne@epa.gov>;

Kemker, Carol < Kemker. Carol@epa.gov>; Fite, Mark < Fite. Mark@epa.gov>

Cc: Heard, Anne <Heard.Anne@epa.gov>; Hicks, Javoyne <Hicks.Javoyne@epa.gov>; Jones-Johnson, Shea <Jones-Johnson.Shea@epa.gov>; Jenkins, Brandi <Jenkins.Brandi@epa.gov>; Lincoln, Larry <Lincoln.Larry@epa.gov>; Hill, Franklin <Hill.Franklin@epa.gov>; Worley,

Gregg < Worley. Gregg@epa.gov>

Subject: RE: Waiver of Certain Reformulated Gasoline Regulations

Thank you, Ken

Kenneth R. Lapierre

Acting Deputy Regional Administrator

U.S. EPA Region 4

(404) 562-8570

From: Davis, Amber

Sent: Friday, September 16, 2016 2:52 PM

To: Lapierre, Kenneth < Lapierre. Kenneth@epa.gov >; Gettle, Jeaneanne

< Gettle Jeaneanne@epa.gov >; Kemker, Carol < Kemker.Carol@epa.gov >; Fite, Mark

< Fite. Mark@epa.gov>

Cc: Heard, Anne < Heard. Anne@epa.gov >; Hicks, Javoyne < Hicks. Javoyne@epa.gov >; Jones-Johnson, Shea < Jones-Johnson. Shea@epa.gov >; Jenkins, Brandi < Jenkins. Brandi@epa.gov >; Lincoln, Larry < Lincoln. Larry@epa.gov >; Hill, Franklin < Hill. Franklin@epa.gov >; Worley, Gregg < Worley. Gregg@epa.gov >

Subject: RE: Waiver of Certain Reformulated Gasoline Regulations

I just got off the phone with HQ. They were in a bit of a rush because they have a call scheduled for 3:00pm today (in ten minutes) with Colonial Pipeline to discuss the request. In terms of the waiver approval process, it is the same as the one that happened earlier this week with the 7.8 RVP in Georgia and Tennessee. I will keep you in the loop as I learn more.

Amber Davis, Chief | Communities Support Section | U.S. Environmental Protection Agency | Region 4 | APTMD | 61 Forsyth St. SW | Atlanta, GA 30303 | Tel 404.562.9014 | davis.amber@epa.gov

From: Davis, Amber

Sent: Friday, September 16, 2016 2:38 PM

To: Lapierre, Kenneth < lapierre.kenneth@epa.gov >; Gettle, Jeaneanne

<Gettle.Jeaneanne@epa.gov>; Kemker, Carol < Kemker.Carol@epa.gov>; Fite, Mark

< Fite. Mark@epa.gov>

Cc: Heard, Anne < Heard.Anne@epa.gov >; Hicks, Javoyne < Hicks.Javoyne@epa.gov >; Jones-Johnson, Shea < Jones-Johnson.Shea@epa.gov >; Jenkins, Brandi < Jenkins.Brandi@epa.gov >; Lincoln, Larry < Lincoln.Larry@epa.gov >; Hill, Franklin < Hill.Franklin@epa.gov >; Worley, Gregg < Worley.Gregg@epa.gov >

Subject: RE: Waiver of Certain Reformulated Gasoline Regulations

We just got some conflicting information from another office in HQ saying that the company can make the request, but the states have to concur. I am trying to track this down now.

Amber Davis, Chief | Communities Support Section | U.S. Environmental Protection Agency | Region 4 | APTMD | 61 Forsyth St. SW | Atlanta, GA 30303 | Tel 404.562.9014 | davis.amber@epa.gov

From: Lapierre, Kenneth

Sent: Friday, September 16, 2016 2:35 PM

To: Gettle, Jeaneanne < Gettle Jeaneanne@epa.gov >; Davis, Amber < Davis Amber@epa.gov >;

Kemker, Carol < Kemker.Carol@epa.gov >; Fite, Mark < Fite.Mark@epa.gov >

Cc: Heard, Anne < Heard. Anne@epa.gov >; Hicks, Javoyne < Hicks. Javoyne@epa.gov >; Jones-Johnson, Shea < Jones-Johnson. Shea@epa.gov >; Jenkins, Brandi < Jenkins. Brandi@epa.gov >;

Lincoln, Larry < Lincoln.Larry@epa.gov >; Hill, Franklin < Hill.Franklin@epa.gov >

Subject: FW: Waiver of Certain Reformulated Gasoline Regulations

Jeaneanne and Amber,

Can you pride us with a briefing paper about this waiver process? I am not familiar with this one at all.

Thanks--Ken

Kenneth R. Lapierre

Acting Deputy Regional Administrator

U.S. EPA Region 4

(404) 562-8570

From: Gettle, Jeaneanne

Sent: Friday, September 16, 2016 2:19 PM

To: Heard, Anne < Heard. Anne@epa.gov >; Lapierre, Kenneth < Lapierre. Kenneth@epa.gov > Cc: Hicks, Javoyne < Hicks. Javoyne@epa.gov >; Jenkins, Brandi < Jenkins. Brandi@epa.gov >; Jenkins, Brandi < Hill. Franklin@epa.gov >; Jenkins, Randall. Franklin@epa.gov >; Hill, Franklin < Hill. Franklin@epa.gov >; Chaffins, Randall < Chaffins. Randall@epa.gov >; Webster, James < Webster. James@epa.gov >; Kemker, Carol < Kemker. Carol@epa.gov >; Fite, Mark < Fite. Mark@epa.gov >; Davis, Amber

<<u>Davis Amber@epa.gov</u>>

Subject: Fwd: Waiver of Certain Reformulated Gasoline Regulations

Anne and Ken:

I wanted to make you aware that based on our consultation with HQ the states must make this request, not Colonial Pipeline.

I have advised Franklin and am copying him here. If you have any questions this afternoon, Amber Davis is in the office and I am available via cell except btwn 3:30 - 6:00. My cell is 404-861-6626.

Thanks

Jeaneanne
Sent from my iPhone
On Sep 16, 2016, at 1:39 PM, Webster, James < Webster.James@epa.gov > wrote:
Thanks Terry
Jeaneanne, FYI
From: Stilman, Terry Sent: Friday, September 16, 2016 1:31 PM To: Webster, James < Webster. James@epa.gov > Cc: Berry, Chuck < Berry. Chuck@epa.gov >; Moore, Tony < moore.tony@epa.gov > Subject: FW: Waiver of Certain Reformulated Gasoline Regulations
Jim,
As we discussed.
Terry.
From: Coleman, Shannon P. [mailto:spcoleman@colpipe.com] Sent: Friday, September 16, 2016 1:24 PM To: Stilman, Terry < Stilman. Terry@epa.gov > Cc: Lohoff, Drew < dlohoff@colpipe.com >; Harris, Erin < eharris@colpipe.com >; Seagraves, Preston T < PSeagrav@colpipe.com > Subject: Waiver of Certain Reformulated Gasoline Regulations

Terry,

Colonial is requesting a waiver of 40 CFR § 80.78(a)(7), which will allow us to

comingle RBOB and CBOB prior to the addition of ethanol. As well as a waiver pursuant to CAA § 211(c)(4)(C)(ii)(I), 42 U.S.C. § 7545(c)(4)(C)(ii)(I) to allow conventional gasoline to be sold in Designated RFG Covered Areas. This waiver would need to encompass RBOB and CBOB moved on Colonial Pipeline and Plantation Pipeline. Colonial anticipates needing this waiver for two to four weeks.

I believe my colleague in quality assurance has also reached out to a contact at EPA (Jeff Herzog), so we may be coming at this from both directions. Our apologizes.

My contact information is shown below. Please feel free to call or e-mail with any additional questions or concerns.

Regards,

Shannon

Shannon P. Coleman

Colonial Pipeline Company

1185 Sanctuary Pkway, Suite 100

Alpharetta, GA 30009

Direct: 678-

Sent from my iPhone

Begin forwarded message:

From: "Webster, James" < Webster.James@epa.gov>

Date: September 16, 2016 at 1:39:06 PM EDT

To: "Stilman, Terry" < Stilman. Terry@epa.gov >, "Gettle, Jeaneanne"

<Gettle.Jeaneanne@epa.gov>, "Kemker, Carol" < Kemker.Carol@epa.gov>, "Hill,

Franklin" < Hill.Franklin@epa.gov>

Cc: "Berry, Chuck" < Berry.Chuck@epa.gov >, "Moore, Tony" < moore.tony@epa.gov > Subject: RE: Waiver of Certain Reformulated Gasoline Regulations

Thanks Terry

Jeaneanne, FYI

From: Stilman, Terry

Sent: Friday, September 16, 2016 1:31 PM
To: Webster, James < Webster. James@epa.gov >

Cc: Berry, Chuck < Berry, Chuck@epa.gov >; Moore, Tony < moore.tony@epa.gov >

Subject: FW: Waiver of Certain Reformulated Gasoline Regulations

Jim,

As we discussed.

Terry.

From: Coleman, Shannon P. [mailto:spcoleman@colpipe.com]

Sent: Friday, September 16, 2016 1:24 PM
To: Stilman, Terry < Stilman. Terry@epa.gov>

Cc: Lohoff, Drew < dlohoff@colpipe.com>; Harris, Erin < eharris@colpipe.com>;

Seagraves, Preston T < PSeagrav@colpipe.com>

Subject: Waiver of Certain Reformulated Gasoline Regulations

Terry,

Colonial is requesting a waiver of 40 CFR § 80.78(a)(7), which will allow us to comingle RBOB and CBOB prior to the addition of ethanol. As well as a waiver pursuant to CAA § 211(c)(4)(C)(ii)(I), 42 U.S.C. § 7545(c)(4)(C)(ii)(I) to allow conventional gasoline to be sold in Designated RFG Covered Areas. This waiver would need to encompass RBOB and

A Markey States

CBOB moved on Colonial Pipeline and Plantation Pipeline. Colonial anticipates needing this waiver for two to four weeks.

I believe my colleague in quality assurance has also reached out to a contact at EPA (Jeff Herzog), so we may be coming at this from both directions. Our apologizes.

My contact information is shown below. Please feel free to call or e-mail with any additional questions or concerns.

Regards,

Shannon

Shannon P. Coleman

Colonial Pipeline Company

1185 Sanctuary Pkway, Suite 100

Alpharetta, GA 30009

Direct: 678-762-2523

Mobile:

Exemption 6 Personal Privacy

To: Davis, Amber[Davis.Amber@epa.gov]; Thompson,

Christopher[Thompson.Christopher@epa.gov]

Cc: Le, Madison[Le.Madison@epa.gov]; Herzog, Jeff[Herzog.Jeff@epa.gov]; Gustafson,

Kurt[Gustafson.Kurt@epa.gov]; Miller, Anthony[Miller.Anthony@epa.gov]; Webster,

James[Webster.James@epa.gov]

From: Manners, Mary

Sent: Fri 9/16/2016 8:15:15 PM

Subject: RE: Waiver of Certain Reformulated Gasoline Regulations

https://helena.colonialresponse.com/

From that statement:

This afternoon, working in consultation with Unified Command, Colonial Pipeline will begin excavation operations to repair the impacted section of pipe on Line 1. This work will continue throughout the weekend, with Line 1 projected to restart next week. Recovery of gasoline, which remains contained, also continues as safety conditions allow.

From: Davis, Amber

Sent: Friday, September 16, 2016 4:14 PM

To: Thompson, Christopher < Thompson. Christopher@epa.gov>

Cc: Le, Madison <Le.Madison@epa.gov>; Herzog, Jeff <Herzog.Jeff@epa.gov>; Gustafson, Kurt <Gustafson.Kurt@epa.gov>; Miller, Anthony <Miller.Anthony@epa.gov>; Manners, Mary

<manners.mary@epa.gov>; Webster, James <Webster.James@epa.gov>
Subject: RE: Waiver of Certain Reformulated Gasoline Regulations

Jim, can you respond to this?

Amber Davis, Chief | Communities Support Section | U.S. Environmental Protection Agency | Region 4 | APTMD | 61 Forsyth St. SW | Atlanta, GA 30303 | Tel 404.562.9014 | davis.amber@epa.gov

From: Thompson, Christopher

Sent: Friday, September 16, 2016 4:14 PM **To:** Davis, Amber < <u>Davis.Amber@epa.gov</u>>

Cc: Le, Madison < Le.Madison@epa.gov >; Herzog, Jeff < Herzog.Jeff@epa.gov >; Gustafson, Kurt < Gustafson.Kurt@epa.gov >; Miller, Anthony@epa.gov >; Manners, Mary

<manners.mary@epa.gov>

Subject: Re: Waiver of Certain Reformulated Gasoline Regulations

Sorry if already asked...but do your emergency response folks have any inside information as to when colonial will be able to start to make repairs?

Sent from my iPhone

On Sep 16, 2016, at 2:14 PM, Davis, Amber < <u>Davis.Amber@epa.gov</u>> wrote:

Madison,

Thank you for taking my call! I know that you are on the phone with Colonial now. When you're available, can you clarify whether or not this issue is a Region 4 one, or if it is confined to MD, VA, and DC? Thank you so much!

Amber

Amber Davis, Chief | Communities Support Section | U.S. Environmental Protection Agency | Region 4 | APTMD | 61 Forsyth St. SW | Atlanta, GA 30303 | Tel 404.562.9014 | davis.amber@epa.gov

From: Le, Madison

Sent: Friday, September 16, 2016 2:50 PM

To: Herzog, Jeff < Herzog Jeff@epa.gov >; Davis, Amber < Davis.Amber@epa.gov >;

Thompson, Christopher < Thompson.Christopher@epa.gov >; Gustafson, Kurt < Gustafson.Kurt@epa.gov >; Miller, Anthony < Miller.Anthony@epa.gov >

Cc: Manners, Mary < manners.mary@epa.gov>

Subject: RE: Waiver of Certain Reformulated Gasoline Regulations

Amber and I just talked. We are good for now while we wait to get more information from Colonial on this request.

Thanks,

Madison

Madison H. Le,

Director, Fuels Compliance Policy Center (FCPC)

Office of Transportation & Air Quality

U.S. Environmental Protection Agency

1200 Pennsylvania Ave, N.W.

Washington, D.C. 20460

Direct: 202-564-5754

Cell: 202-507-3062

Email: <u>le.madison@epa.gov</u>

From: Herzog, Jeff

Sent: Friday, September 16, 2016 2:49 PM

To: Davis, Amber < Davis. Amber@epa.gov >; Thompson, Christopher

<Thompson.Christopher@epa.gov>; Gustafson, Kurt < Gustafson.Kurt@epa.gov>; Miller,

Anthony < Miller. Anthony@epa.gov>

Cc: Manners, Mary < manners.mary@epa.gov >; Le, Madison < Le.Madison@epa.gov >

Subject: RE: Waiver of Certain Reformulated Gasoline Regulations

I think Madison Le's Fuel Waiver team is on top of this

Terry Stillman and Preston Searles from Colonial Pipeline called me this afternoon.

I talked to Marry Manners who suggested that have them all Madison Le.

I called Preston back and suggested he talk to Madison

Jeff Herzog, U.S. EPA, OTAQ, ASD

(734) 214-4227

From: Davis, Amber

Sent: Friday, September 16, 2016 2:01 PM

To: Thompson, Christopher < Thompson.Christopher@epa.gov >; Gustafson, Kurt < Gustafson.Kurt@epa.gov >; Herzog, Jeff < Herzog.Jeff@epa.gov >; Miller, Anthony

< Miller. Anthony@epa.gov>

Subject: FW: Waiver of Certain Reformulated Gasoline Regulations

Chris, Kurt, Jeff, Tony,

Can you respond to the request below or redirect it to the correct person? Please copy me so that I can keep R4 management in the loop. Thank you!

Amber

Amber Davis, Chief | Communities Support Section | U.S. Environmental Protection Agency | Region 4 | APTMD | 61 Forsyth St. SW | Atlanta, GA 30303 | Tel 404.562.9014 | davis.amber@epa.gov

From: Gettle, Jeaneanne

Sent: Friday, September 16, 2016 1:54 PM

To: Worley, Gregg < Worley. Gregg@epa.gov >; Davis, Amber < Davis. Amber@epa.gov > Cc: Kemker, Carol < Kemker. Carol@epa.gov >; Fite, Mark < Fite. Mark@epa.gov >; Toney, Anthony@epa.gov >; Benjamin, Lynorae < benjamin.lynorae@epa.gov >

Subject: Fwd: Waiver of Certain Reformulated Gasoline Regulations

Amber

Can you pls look into this and let me know what if anything we need to do on this. Im copying Lynorae in case she can provide insight.

JMG

Sent from my iPhone

Begin forwarded message:

From: "Webster, James" < Webster.James@epa.gov>

Date: September 16, 2016 at 1:39:06 PM EDT

To: "Stilman, Terry" < Stilman. Terry@epa.gov >, "Gettle, Jeaneanne"

< Gettle.Jeaneanne@epa.gov>, "Kemker, Carol" < Kemker.Carol@epa.gov>, "Hill,

Franklin" < Hill.Franklin@epa.gov>

Cc: "Berry, Chuck" < Berry.Chuck@epa.gov >, "Moore, Tony"

<moore.tony@epa.gov>

Subject: RE: Waiver of Certain Reformulated Gasoline Regulations

Thanks Terry

Jeaneanne, FYI

From: Stilman, Terry

Sent: Friday, September 16, 2016 1:31 PM

To: Webster, James < Webster. James@epa.gov>

Cc: Berry, Chuck < Berry. Chuck@epa.gov >; Moore, Tony < moore.tony@epa.gov >

Subject: FW: Waiver of Certain Reformulated Gasoline Regulations

Jim,

As we discussed.

Terry.

From: Coleman, Shannon P. [mailto:spcoleman@colpipe.com]

Sent: Friday, September 16, 2016 1:24 PM
To: Stilman, Terry < Stilman. Terry@epa.gov>

Cc: Lohoff, Drew <dlohoff@colpipe.com>; Harris, Erin <eharris@colpipe.com>;

Seagraves, Preston T < PSeagrav@colpipe.com>

Subject: Waiver of Certain Reformulated Gasoline Regulations

Terry,

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I believe my colleague in quality assurance has also reached out to a contact at EPA (Jeff Herzog), so we may be coming at this from both directions. Our apologizes.

My contact information is shown below. Please feel free to call or e-mail with any additional questions or concerns.

Regards,

Shannon

Shannon P. Coleman

Colonial Pipeline Company

1185 Sanctuary Pkway, Suite 100

Alpharetta, GA 30009

Direct: 678-762-2523

Mobile:

Exemption 6 Personal Privacy

To: Thielhorn, Kurt[kurt.thielhorn@atf.gov]; Russell, Leah[Leah.Russell@faa.gov]; Webster, James[Webster.James@epa.gov]; Dodrill, Keith[keith.dodrill@neti.doe.gov]; Shawn R.

Young

From: FEMA-R4-WatchUnit Sent: Fri 9/16/2016 6:04:29 PM

Subject: New Time ! RRT 4 Incident Specific Activation - Pelham Pipeline Spill FW New Time ! RRT 4 Incident Specific Activation - Pelham Pipeline Spill.ics

All,



Attached is the calendar invite for the Pelham Pipeline Spill. The conference call starts at 1400 and ends at 1500. The call number is 1-1(b) (6) and the pin number is

FW: New Time ! RRT 4 Incident Specific Activation - Pelham Pipeline Spill

1-

20160916T18000UZ

PRODID

-//Microsoft Corporation//Outlook 15.0 MIMEDIR//EN

Version

2.0

METHOD

Attendee

REQUEST

X-MS-OLK-FORCEINSPECTOROPEN

TRUE

Attendee mailto:FEMA-R4-WatchUnit@fema.dhs.g ov RSVP TRUE <u>Attendee</u> mailto:Terry.Brown5@fema.dhs.gov RSVP TRUE Attendee mailto:Lora.Goza@fema.dhs.gov RSVP TRUE <u>Attendee</u> mailto:Stacy.Gunnin@fema.dhs.gov RSVP TRUE **Attendee** mailto:Kertz.Hare@fema.dhs.gov RSVP TRUE **Attendee** mailto:Jerry.Haney@fema.dhs.gov RSVP TRUE **Attendee** mailto:Lorenza.James@fema.dhs.gov RSVP TRUE Attendee mailto:Barbara.Sanders@fema.dhs.go v RSVP TRUE <u>Attendee</u> mailto:Paul.Williams6@fema.dhs.gov RSVP TRUE <u>Attendee</u> mailto:Glen.Sachtleben@fema.dhs.go v RSVP TRUE mailto:Donald.Robinson@HQ.DHS.GOV <u>Attendee</u> RSVP TRUE

mailto:Mary.Hudak@fema.dhs.gov

RSVP TRUE

mailto:Robert.S amaan@fema.dhs.gov **Attendee** OPT-PARTICIPANT Role RSVP TRUE mailto:Gracia. Szczech@fema.dhs.gov **Attendee** Role OPT-PARTICIPANT RSVP TRUE mailto:Forest.A.Willis@uscq.mi l **Attendee** RSVP TRUE mailto:Webster.James@epa.gov **Attendee** RSVP TRUE mailto:Joyce Stanley@ios.do i.gov **Attendee** RSVP TRUE mailto:GSpringer@adem.stat e.al.us **Attendee** RSVP TRUE mailto:Berry.Chuck@epa.gov **Attendee** RSVP TRUE mailto:Lori.A.Loughran@uscg.m il **Attendee** RSVP TRUE mailto:Eichinger.Kevin@epa.gov **Attendee** RSVP TRUE mailto: lindy nelson@ios.doi.gov **Attendee** Role OPT-PARTICIPANT RSVP TRUE mailto:gwen.keena n@fema.dhs.gov **Attendee** Role OPT-PARTICIPANT RSVP TRUE mailto:Stilman. Terry@epa.gov **Attendee** Role OPT-PARTICIPANT RSVP TRUE mailto:Harper.Gre g@epa.gov **Attendee** Role OPT-PARTICIPANT RSVP TRUE mailto:moore.tony@epa.gov **Attendee** Role OPT-PARTICIPANT RSVP TRUE mailto:GSpring er@adem.alabama.gov **Attendee** Role OPT-PARTICIPANT RSVP TRUE

Categories

PUBLIC

CREATED

20160916T175227Z

Description

Again watch please forward with new time1/3/12/15

Gwen K eenan FEMAR IV Response Division Director

Sent from my iFEMA mobile device.

All times listed are in the following time zone:UTC

From: Andrew, Gary

Sent: Friday, Septembe r 16, 2016 2:24:46 PM

To: Willis, Forest A CIV; Webster, James; Joyc e Stanley@ios.doi.gov: GSpringer@adem.state.al.us; Berry, Chuck; Loug hran, Lori A LCDR;

Eichinger, Kevin; Andrew, Gary

Cc: lindy_nelson@ ios.doi.gov; Keenan, Gwen; Stilman, Terry; Harper,

3reg; Moore, T ony; Springer, Grady; Sachtleben, Glen

Subject: New Time ! RRT 4 Inci dent Specific Activation - Pelham

Pipeline Spill

When: Friday, Septembe r 16, 2016 6:00 PM-7:00 PM.

Where: 1-

Tim e Adjusted to Meet Field Schedule

Draft Agenda:

RRT 4 Incident Spe cific Activation: Pelham Pipeline Spill

Roll Call: Gary Andrew Welcome: James Webster Site Briefing: EPA OSC Chuck Berry

Discussion: James Webst er ESummary: Gary Andrew

Closing Comments: Co-Chairs, ADEM, DOI

Call-in #:

Conferenc

End Date/Time

20160916T190000Z

DTSTAMP

20160916T142501Z

Start Date/Time

Redaction(s) subject to Exemption 6 (Personal **Privacy Information**)

20160916T180000Z

Last Modified

20160916T175227Z

Location

1-866-299-3188; 4045628758#

ORGANIZER (CN="Andrew, Gary") mailto:Andrew.Gary@epa.gov

Priority

5

Sequence Number

0

Summary

FW: New Time ! RRT 4 Incident Specific Activation - Pelham Pipeline Spill

Time Transparency

OPAQUE

UID

X-ALT-DESC (FMTTYPE=text/html)

<html><head>

<meta name="Generator" content ="Microsoft Exchange Server">

<!-- converted from text -->

<style><!-- . EmailQuote { margin-left: 1pt; padding-left: 4pt; border-left: #800000 2 px solid; } -- ></style></head>

<body>

zone:UTC<div> </div><hr tabindex="-1">From: Andrew, Gary
b>Sent: Friday, September 16, 2016 2:24:46 PM
br>
b> To: Willis, Forest A

CIV; Webster, James; J oyce_Stanley@ios.doi.gov; GSpringer@adem.state.al.us; Berry, Chuck; Lo ughran, Lori A LCDR; Eichinger, Kevin; Andrew, Gary

- Cond. Candal Cond. Co

Keenan, Gwen; Stilman, Terry; Harper, Greg; Moore, Tony; Springer, Grady; Sachtleben, Glen

Subject:
New Time! RRT 4 Incident Specific Activation - Pelham Pipeline

Glen

Subject:
New Time ! RRT 4 Incident Specific Activation - Petram Pipeline

Spill

Spill

Spill

Spill

Specific Activation - Petram Pipeline

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Specific Activation - Petram Pipeline

Spill

Spill<br/

<div class="PlainText">Time Adjusted to Me et Field
Schedule

Draft Agenda:

RRT 4 Incident Specific Activation: Pelham Pipeline Spill
br>

Roll Call: Gary A ndrew

Welcome: James Webster

Site Briefing: EPA OSC Chuck Berry< br>

Discussion: James Webster

Summary: Gary Andrew

Closing Comm ents: Co-Chairs, ADEM, DOI

br>

br>

Call-in #: 866
Conference #:
</div>
</body>
</html>

Janu 2 Internal Agency Aules

X-MICROSOFT-CDO-BUSYSTATUS

BUSY

X-MICROSOFT-CDO-IMPORTANCE

X-MICROSOFT-CDO-INTENDEDSTATUS
BUSY

5 U Pr

Specific

To:

Webster, James[Webster.James@epa.gov]

From:

Dorsey, Claudette

Sent:

Fri 9/16/2016 3:51:11 PM

Subject: SFD Weekly Accomplishments Report for HQ DRAFT - REPORT ITEM DESCRIPTION-09-15-16.docx

Jim, could you take a look at the attached list of items from SAMS that you feel are important enough to go to Headquarters for this week? Please return to me for distribution. Thanks

Claudette Dorsey

Executive Staff Assistant

Environmental Protection Agency

Superfund Division

61 Forsyth Street

Atlanta, Georgia 30303

Office: (404) 562-8540

To:

Webster, James[Webster.James@epa.gov]

From:

Hill. Franklin

Sent:

Fri 9/16/2016 1:43:40 AM

Subject: Fwd: Overview Paper on Colonial Pipeline Spill and Fuel Waiver

Fuel Waiver Concerning Atlanta Georgia and Nashville Tennessee (Final Signed) pdf

ATT00001.htm

Colonial Pipeline Spill and Fuel Waiver 2016.docx

ATT00002.htm

Jim this is what they forwarded this afternoon

Sent from my iPhone

Begin forwarded message:

From: "Davis, Amber" < <u>Davis.Amber@epa.gov</u>> Date: September 15, 2016 at 12:29:44 PM EDT

To: "Gettle, Jeaneanne" < Gettle. Jeaneanne@epa.gov>

Cc: "Webster, James" < Webster. James@epa.gov>, "Moore, Tony"

<moore.tony@epa.gov>, "Worley, Gregg" < Worley.Gregg@epa.gov>, "Thompson,

Christopher" < Thompson.Christopher@epa.gov>, "Gustafson, Kurt"

< Gustafson.Kurt@epa.gov>, "Worley, Gregg" < Worley.Gregg@epa.gov>, "Fite, Mark"

< Fite.Mark@epa.gov >, "Hill, Franklin" < Hill.Franklin@epa.gov >, "Kemker, Carol"

< Kemker.Carol@epa.gov >, "Delli-Gatti, Dionne" < Delli-Gatti.Dionne@epa.gov >, "Wise,

Allison" < Wise. Allison@epa.gov >, "Harper, Greg" < Harper. Greg@epa.gov >, "Benjamin,

Lynorae" < benjamin.lynorae@epa.gov>

Subject: Overview Paper on Colonial Pipeline Spill and Fuel Waiver

Jeaneanne,

Please see the attached overview of the Colonial Pipeline spill and subsequent fuel waiver granting process. The document has been reviewed by both Superfund and OECA. For reference, the signed waiver is also attached. Please don't hesitate to let me know if you need anything else as you prepare for the briefing with Administrator McCarthy.

Amber

P.S. A special thank you to Tony Moore and Chris Thompson for submitting their edits lickety-split!

Amber Davis, Chief | Communities Support Section | U.S. Environmental Protection Agency | Region 4 | APTMD | 61 Forsyth St. SW | Atlanta, GA 30303 | Tel 404.562.9014 | davis.amber@epa.gov

Colonial Pipeline Spill and Fuel Waiver Overview September 15, 2016

Colonial Pipeline is an Alpharetta, Georgia based company that operates 5,500 miles of pipeline from Houston to the New York harbor. On September 9, 2016 at 1449 hours, the company reported a gasoline spill in Shelby County, Alabama from a 36" subsurface transmission line to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek, a tributary of the Cahaba River. Two ponds have been directly impacted by the discharge with defensive measures established and close monitoring on a third pond. The initial report to Colonial Pipeline was made by the property owner with no volume estimate. When Colonial Pipeline first communicated with the responding On Scene Coordinator (OSC), it was indicated that between 1,000 and 2,000 gallons of gasoline had entered the pond. The spill volume has since been updated to 235,000 gallons.

The local fire department responded and established a secured zone around the spill site. Dangerous explosive gas levels were detected around the spill location. Shelby County Emergency Management responded and confirmed that there were no public or private drinking water sources threatened by the spill.

The Alabama Department of Environmental Management is integrated into Unified Command (UC) and is coordinating with the EPA, Colonial Pipeline and county agencies. An Incident Command Post is established in Hoover, Alabama. The spill location is in a remote area and no evacuations are necessary. The nearest residential neighborhood is located two miles from the spill location.

Colonial Pipeline has confirmed that the impacted transmission line is shut down. Environmental contractors for Colonial Pipeline are on site to conduct air monitoring and remediation activities. Work to remediate the spill is delayed due to the high concentrations of volatile organic compounds (VOC) emitted for the large areas of pooled gasoline and fuel emissions within explosive limits.

Threatened and endangered (T&E) species in the area of the spill have been identified and communicated to Unified Command. No T&E species have been reported impacted from the spill, although several common species have been impacted.

Colonial Pipeline is actively vacuuming product and pressuring the line with nitrogen to increase recovery in an effort to purge the pipeline. The pressurization of the line increases the rate of discharge at the break. Lower Explosive Limit (LEL) levels at the break are too high to recover product before it discharges to the stream and then into the ponds.

The high level of explosive vapors continue to be the greatest limiting factor to the recovery operations. A contractor for Colonial Pipeline is providing roving air monitoring and escort services for personnel working inside the hot zone. Action levels for benzene, VOCs, and explosive vapors were established at the start of the response. Work interruptions continue due to excessive benzene and LEL readings. On September 14, the highest VOC level peaked at 989 parts per million (ppm). The highest benzene level recorded was 17.5 ppm. LEL levels were reported to be in the 41% range.

Colonial Pipeline has removed approximately 178,217 gallons of liquid from Pond 2. Of that, 48,125 gallons of fuel have been recovered, and 130,092 gallons of mixed oil/water remain. The company has performed an initial mass balance calculation and determined an estimated volume of 235,919 gallons of fuel was discharged. They are estimating 144,035 gallons of fuel evaporated as of September 13. Colonial Pipeline will perform a final mass balance after all product is recovered. A substantial

underflow dam has been put in place at the outfall of third pond, which continues to be monitored by Colonial Pipeline. No oil sheening has been seen along the shoreline. The UC will be notified if any petroleum is noted. No adverse weather impacts are expected.

Representatives from the EPA and the U.S. Coast Guard Gulf Strike Team (GST) remain incorporated into the Operations Section and air monitoring. The OSC for Operations and two GST members continue to provide oversight of site safety and monitor the operations progress. Two GST members continue to observe night operations.

A representative of the EPA Region 4 Office of External Affairs arrived at Incident Command Center and integrated into Joint Information Center (JIC) on September 14. The JIC set up two interviews with all member of the UC. AL.com and WBRC, news outlets from Birmingham, Alabama, were present. Additionally, Colonial Pipeline visited the 15 homes nearest to the spill site. They were able to discuss the situation with nine households, as well as handout fact sheets.

The fire chief deemed that the transfer of product from the pipeline to frac tanks was too high risk, so operations are utilizing tanker trucks. Scrubbers are being used to reduce the gasoline vapors on vacuum trucks while they pumped product from the pipeline to transport tanker trucks. Tanker trucks are making a round trip to Colonial Pipeline's Pelham Junction facility to off-load.

On September 14, the UC learned that the Colonial Pipeline contractor began collecting water samples on Saturday, September 10. Nine sampling locations have been established. Two water samples collected from Pond 3 had benzene levels detected at 90 mg/L and 98 mg/L, and the other seven were below detection limits.

Due to the ongoing response efforts and unknown timelines, the EPA OSC will make a request to the National Pollution Fund Center to increase the site ceiling from \$45,000 to \$100,000. The OSC has requested two START contractors and an Environmental Unit Leader to monitor Colonial Pipeline's sampling efforts. EPA will continue to participate in the UC, monitor removal activities, monitor air safety, participate in the JIC, prepare for and coordinate a transition to a removal phase, and begin water sampling.

On September 13, the Georgia Environmental Protection Division (EPD) learned that with less than 72 hours before the expiration of summer ozone season, there were shortages of 7.8 Reid vapor pressure (RVP) gasoline at several gasoline terminals supplying the Atlanta metropolitan area due to the Colonial Pipeline incident. (40 CFR Part 80 requires the use of 7.8 RVP gasoline from June 1 to September 15 in certain nonattainment areas to reduce evaporative emissions from gasoline that contribute to ground-level ozone.) That day EPD requested a waiver to use available 9.0 RVP gas until 11:59 p.m. on September 15 when the summer ozone season expires. The request included Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale counties.

EPA immediately began the process of verifying that the Clean Air Act statutory requirements for an emergency fuel waiver had been met. This effort included reaching out to various industry contacts for information on product availability and consulting with the Department of Energy (DOE). On September 14, the Tennessee Department of Environment & Conservation requested a fuel waiver based on similar supply issues in the Nashville metropolitan area, and EPD updated its request. The affected Tennessee counties included Davidson, Rutherford, Sumner, Williamson, and Wilson.

That evening EPA, in concurrence with DOE, determined that it was necessary to take action to

minimize or prevent disruption of an adequate supply of fuel to consumers and waived the federal gasoline low volatility requirements under the Clean Air Act for the 13 counties in metropolitan Atlanta and five counties in metropolitan Nashville, and a joint waiver was granted. It is attached for reference. Under this temporary waiver, regulated parties may sell or distribute gasoline with a maximum RVP of 9.0 psi (10.0 psi if the gasoline contains between 9% and 10% ethanol) in the affected counties through 11:59 p.m. on September 15, 2016.

During the fuel waiver process EPA maintained regular communication with both state entities via email, personal calls, and conference calls. The EPA will continue to work with DOE to monitor the impact of the pipeline failure on the fuel supply situation in the affected counties and the region.

ORDER



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

SEP 1 4 2018

THE ACMINISTRATOR

The Honorable Nathan Deal Governor of Georgia 206 Washington Street 111 State Capitol Atlanta, Georgia 30334

The Honorable Bill Haslam Governor of Tennessee State Capitol, 1st Floor 600 Charlotte Ave Nashville, Tennessee 37243

Re: Fuel Waiver Concerning Atlanta, Georgia and Nashville, Tennessee

Dear Governor Deal and Governor Haslam:

This letter is in response to your September 14, 2016 requests that the U.S. Environmental Protection Agency waive the federal gasoline low volatility requirements under the Clean Air Act (CAA) for 13 counties in metropolitan Atlanta, Georgia, and five counties in metropolitan Nashville, Tennessee, (the Affected Counties) due to a disruption in the supply of low volatility fuel caused by an unanticipated pipeline failure in Alabama on a pipeline owned by the Colonial Pipeline Company. The EPA and the U.S. Department of Energy have been actively monitoring the supply of fuel to the Affected Counties. In addition, we have been coordinating with Georgia and Tennessee state officials throughout this period. The EPA has determined, and DOE concurs, that it is necessary to take action to minimize or prevent disruption of an adequate supply of fuel to consumers in the Affected Counties. By this letter, I am granting a waiver of the 7.8 pounds per square inch (psi) Reid vapor pressure (RVP) requirement for gasoline, as provided below.

The regulations promulgated under the CAA require gasoline sold in the Affected Counties to have a maximum RVP of 7.8 psi during the "high ozone" season, which lasts through 11:59 p.m. September 15, 2016, after which state compliant gasoline may be sold and distributed in the Affected Counties under applicable regulations. See 40 C.F.R. § 80.27(a)(2)(ii) and EPA guidance at https://www.epa.gov/gasoline-standards/gasoline-reid-vapor-pressure. The unanticipated pipeline failure has resulted in a significant curtailment of the supply of 7.8 psi RVP gasoline available for distribution in the Affected Counties because the Colonial Pipeline supplies a large portion of the low volatility fuel to the Affected Counties.

¹ Georgia Counties: Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, Rockdale. Tennessee Counties: Davidson, Rutherford, Sumner, Williamson, Wilson Internet Address (UPIL) a http://www.apa.gov

I have determined that an "extreme and unusual fuel supply circumstance" exists that will prevent the distribution of an adequate supply of gasoline to consumers in the Affected Counties. CAA § 211(c)(4)(C)(ii)(1), 42 U.S.C. § 7545(c)(4)(C)(ii)(1). This extreme and unusual fuel circumstance is the result of a pipeline failure, an event that could not reasonably be foreseen or prevented, and is not attributable to a lack of prudent planning on the part of suppliers of the fuel to these areas. CAA § 211(c)(4)(C)(ii)(11), 42 U.S.C. § 7545(c)(4)(C)(ii)(11). Further, I have determined that it is in the public interest to grant this waiver and that this waiver applies to the smallest geographic area necessary to address the fuel supply circumstances. CAA § 211(c)(4)(C)(ii)(11) and (iii)(1), 42 U.S.C. § 7545(c)(4)(C)(ii)(11) and (iii)(1).

Therefore, to minimize or prevent problems with the supply of gasoline, I am today issuing this waiver of the 7.8 psi RVP requirement for gasoline sold in the Affected Counties for the remainder of the "high ozone" season. This waiver is effective immediately and will continue through 11:59 p.m. September 15, 2016. Under this temporary waiver, regulated parties may sell or distribute gasoline with a maximum RVP of 9.0 psi (10.0 psi if the gasoline contains between 9 percent and 10 percent ethanol) in the Affected Counties.

The EPA will continue to work with DOE to monitor the impact of the pipeline failure on the fuel supply situation. If you have questions you may call me, or your staff may call Phillip A. Brooks at (202) 564-0652.

Sincerely

Gina McCarthy

ce: The Honorable Dr. Ernest Moniz Secretary of Energy